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THESIS

DEVELOPMENT OF AN AUTOMATED MICRO-COMPUTER KNOWLEDGE-BASED INTEGRATED CONFIGURATION MANAGEMENT SYSTEM FOR THE STOCK POINT LOGISTICS INTEGRATED COMMUNICATIONS ENVIRONMENT (SPLICE) PROJECT MANAGEMENT STAFF

by

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March 1986

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This thesis documents the development of a micro-computer knowledge-based integrated configuration management system for use by Naval Supply Systems Command (NAVSUP) Stock Point Logistics Integrated Communications Environment (SPLICE) Project Staff. A myriad of configuration heuristics associated with the configuration of a SPLICE site are identified. It also provides SPLICE project staff personnel a more accurate, reliable and efficient method of performing the configuration process and managing the overall project. The development of this integrated configuration management system employs both a prototype and software engineering menthodology. The integrated configuration management system will be developed using custom generated software and the logical integration of several off-the-shelf commercial software packages.

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Development of an Automated Micro-computer Knowledge-based Integrated Configuration Management System for the Stock Point Logistics Integrated Communications Environment (SPLICE) Project Management Staff

by

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Lieutenant Commander, Supply Corps, United States Navy
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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

This thesis documents the development of a micro-computer knowledge-based integrated configuration management system for use by Naval Supply Systems Command (NAVSUP) Stock Point Logistics Integrated Communications Environment (SPLICE) Project Staff. A myriad of configuration heuristics associated with the configuration of a SPLICE site are identified. It also provides SPLICE project staff personnel a more accurate, reliable and efficient method of performing the configuration process and managing the overall project.

The development of this integrated configuration management system employs both a prototype and software engineering methodology. The integrated configuration management system will be developed using custom generated software and the logical integration of several off-the-shelf commercial software packages.

THESIS DISCLAIMER

The reader is cautioned that computer programs developed in this research may not have been exercised for all cases of interest. While every effort has been made, within the time available, to ensure that the programs are free of computational and logic errors, they cannot be considered validated. Any application of these programs without additional verification is at the risk of the user.

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I. INTRODUCTION

A. PURPOSE

The Naval Supply Systems Command (NAVSUP) Stock Point Logistics Integrated Communications Environment (SPLICE) Project Manager is tasked with the responsibility to oversee, direct and review all aspects of the SPLICE project. More specific responsibilities of the SPLICE Project Manager include:

1. ADP equipment acquisition
2. ADP software development
3. Coordination of installations and implementations with field activities

In order to perform the latter of the above responsibilities, the Project Manager must maintain a complete history of all configuration components and component changes. This requirement applies to each component of hardware, software and documentation for the complete fifteen year life cycle of the project.[Ref. 1]

This thesis is designed to provide the Project Manager the capability to perform these functions in an automated manner. A micro-computer knowledge-based integrated configuration management system is seen as the means to accomplish the task. To aid in the development of such a system and reduce development time and difficulty,

functional off-the-shelf commercial packages, where feasible, were used. The system was also designed as a user-friendly interactive system.

B. BACKGROUND

In 1977, NAVSUP conceived and developed the SPLICE project to accomplish the following goals:

1. Provide state-of-the-art local and long haul telecommunications capabilities to sixty-two NAVSUP Stock Points
2. Provide interactive and distributed automated data processing (ADP) capabilities to SPLICE sites
3. Provide capacity relief to aging Burroughs hosts at the Stock Points
4. Standardize and upgrade, via mass replacement, the myriad of minicomputers existing at Stock Points

To achieve these goals, NAVSUP initiated a competitive solicitation for "fault-tolerant" hardware and software. The solicitation was completed in November 1983 and the contract was awarded to Federal Data Corporation (FDC). FDC proposed TANDEM hardware and software to meet most of the solicitation processing and local communication requirements. Network System Corporation hardware and software were proposed to meet the local inter-host communication requirements.

Shortly after the SPLICE contract award, hardware and software components had to be ordered. NAVSUP faced a dilemma. Only a few SPLICE personnel had worked closely with the SPLICE acquisition benchmark and negotiations.

These few people were the only personnel that had sufficient knowledge of the system to configure and generate delivery orders. These personnel developed initial orders by hand to meet the immediate need. Numerous minor errors were encountered with initial orders. FDC corrected the orders to the government and received additional compensation for their efforts.

This manual configuration process was later automated using a software product called SUPERCALC2. It has subsequently transitioned to LOTUS 1-2-3. The basic method of developing these orders remained virtually manual. These few SPLICE personnel, with FDC assistance, developed a series of "rules of thumb" used to configure individual site systems. Many of the original SPLICE group have moved on, taking their knowledge of the system with them.

C. SCOPE

A knowledge-based integrated configuration management software system designed to run on a micro-computer was proposed by a former Fleet Material Support Office[1] (FMSO)

---

[1]FMSO is the Central Design Agency for all NAVSUP software development projects. As such, FMSO is responsible for the project development of the SPLICE project under the guidance and direction of the Systems Commander Project Manager, NAVSUP.

SPLICE project officer[2] to codify these "rules of thumb." The proposed integrated configuration management system will provide NAVSUP with the capability to develop and maintain SPLICE configurations and delivery orders and to perform configuration management for the overall project. The proposed integrated system will be composed of three software modules designed to:

1. Configure initial SPLICE site systems by answering a series of configuration related questions
2. Restructure the system configurer output file into a format compatible for financial and "what-if" analysis
3. Restructure the financial module output file into a format compatible for entry into a data base management system
4. Generate a series of configuration management reports to:
    a. obtain an overall project report
    b. obtain a report for a particular site
    c. obtain a report for a delivery order issued on a particular date
5. Generate a maintenance delivery order for a specific SPLICE site
6. Generate a set of mailing labels for all designated SPLICE sites

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[2]Lieutenant Commander Edward J. CASE, Supply Corps, United States Navy served as SPLICE project officer from September 1981 to August 1984. LCDR CASE was enrolled as a student at the Naval Postgraduate School from October 1984 to March 1986. Much of the research and development of the micro-computer knowledge-based integrated configuration management system is attributed to the prior knowledge, experience and efforts of LCDR CASE.

Development of the micro-computer knowledge-based integrated configuration management system and successful implementation of the configuration heuristics will provide the NAVSUP SPLICE project manager with the capability to perform all assigned configuration management tasks.

II. CONFIGURATION RULES

The success of the knowledge-based integrated configuration management system is largely dependent upon the accurate implementation of the numerous heuristics involved in the configuration of SPLICE site components. Heuristics which must be considered during the configuration process fall into two categories:

1. basic configuration rules which apply to all contract line items under consideration
2. specific configuration rules which apply only to selective contract line items

A breakdown and discussion of these two categories of heuristics is provided below.

A. BASIC CONFIGURATION RULES

A TANDEM processing system consists of a mainframe and its free standing peripherals. A small standard mainframe normally includes two cabinets:

1. processor (CPU) cabinet
2. tape cabinet

The processor cabinet houses the processing units (CPUs) and associated power supplies. The tape cabinet houses a magnetic tape unit, Diagnostic Link control panel, I/O patch panels, battery pack or I/O power supply modules. The I/O patch panels provide attachment points for the signal cables

of various peripherals (ex: CRT terminals, line printers, large capacity disks, etc.). Patch panels are connected to the device controllers residing in the system cabinets through internal cabling.

Additional cabinets (ex: processor, tape, patch panel and expansion) may be added as necessary. Patch panel cabinets provide space for additional patch panels when tape cabinet capacity is inadequate. Generally, mainframe cabinets are fastened together side-by-side to form a single unit.

When two processor cabinets are used in a system and both cabinets contain I/O controllers, additional space for I/O only power supplies may be required. Additional I/O only power supplies may be housed in system expansion cabinets.

System expansion cabinets are required for systems with three or more processor cabinets (or with two processor cabinets connected as noted above). I/O only cabinets must be ordered when system composition reaches four system cabinets. I/O only cabinets may also be necessary to accommodate increased I/O device loads.

Twenty-four I/O slots (four identical backplane assemblies each containing six board slots) are available in a NonStop TXP processor cabinet. The placement of controller boards may result in the need to order additional system or I/O expansion cabinets.

Include one Operations and Service Processor (OSP) with each system.

Every processing unit is supplied with a standard power supply module. The power supply provides several DC voltage levels for use by the CPU, memory and I/O device controllers. No redundant power supply exists for the CPU. Redundancy at the processor unit is obtained with multiple processor units.

In a simple configuration all device controllers are connected to both I/O channels. A simple configuration may be two processors with limited memory and I/O capability.

The I/O channel for a processing unit can accommodate up to thirty-two I/O device controllers. Each device controller can control a maximum of eight devices.

Every I/O controller has two addresses, is dual-ported and is connected to two processor channels.

A one-to-one relationship exists between a controller address and the number of circuit boards it represents with the following exceptions:

1. One 3106 disc controller consists of two boards
2. The 6303 asynchronous controller board accounts for four controller addresses regardless of the number of communications lines it controls. The four controller addresses can represent from one to three boards: one 6303 plus one or two 6304 expansion boards

A fiber optic link (FOX) permits multiple configurations of up to sixteen TANDEM processors each to be directly interfaced. One 6700 FOX controller is required per node.

A special backplane upgrade and replacement is included with the 6700 controller. The FOX controller must reside in the first six (leftmost) I/O slots in the system directly under processor number zero. Any system configuration which includes FOX must consider this requirement. Some such systems may require an additional I/O cabinet to accommodate all controllers. The FOX controller consumes approximately forty-eight amperes of +5 VDC power and may impact the power configuration considerations.

A five strand one-hundred meter air plenum pre-terminated cable, model 7618, should be utilized. The 7618 cable is UL approved for use in air plenum spaces (under raised floors, above false ceilings, etc.) without need for installation in conduit (UL rating VW1). The fifth strand is provided as an integral part of the cable and serves as a spare in case of breakage or intermittent voltage levels.

Terminal communications to the TANDEM hosts is accomplished via specific processor resident ASYNC or SYNC controllers or is off-loaded to a 6100 controller (communications processor).

Network Systems Corporation (NSC) HYPERchannel products enable two or more computer systems to communicate with each other at multi-megabit rates. A HYPERchannel network consists of one or more coaxial cables running the length of the computer room. HYPERchannel adapters are tapped into

the cable and connected to the applicable hosts at designated high speed I/O channel ports. User or NSC software creates the processing sessions among the hosts.

B. UNIQUE CONFIGURATION RULES.

Unique rules must be applied during the configuration process in addition to the basic configuration rules. These additional heuristics apply to all classes of available options (ex: hardware, software, documentation, etc.). The discussions which follow highlight these additional considerations.

1. Hardware

Unique configuration heuristics described below apply to hardware line items.

1. One to four CPUs require one system cabinet and one patch panel. Each CPU is ordered with two megabytes of memory and is augmented with an additional two megabytes of memory.

2. Five to eight CPUs require two system cabinets, one patch panel and one expansion cabinet.

3. Nine to twelve CPUs require three system cabinets, two patch panels and one expansion cabinet.

4. Larger configurations are built using multiples of the above three rules.

5. The FLOATING POINT ARITHMETIC microcode for FORTRAN processing is only ordered for the two FMSO sites (Sites 02 and 03).

6. An Operations and Service Processor (OSP), with a TANDEM 6530 CRT attached, is ordered for each configuration of sixteen processors or portions thereof. The OSP must be capable of using an

attached Centronics Printer with a printer interface unit that permits switching among two OSPs.

7. Each system cabinet requires three I/O power modules.

8. Each system cabinet has twenty-four slots. Each controller (ex: disk controller, LP/CR controller, etc.) occupies two slots.

9. One disk controller is needed for every two disk units ordered.

10. Disk controllers must be ordered in pairs.

11. One disk patch panel is required for every four disk controllers.

12. HYPERchannel adapters may only be ordered by sites designated as stock points. Available HYPERchannel adapters are listed as follows:

    a. A140 - UNIVAC host interface.

    b. A150 - Burroughs B4800 host interface. An EBCDIC-to-ASCII Conversion RAM board is ordered with each A150 adapter to facilitate TANDEM-to-Burroughs communications.

    c. A220 - IBM host interface.

    d. A400 - Standard minicomputer interface used for TANDEM and PERKIN-ELMER hosts. Each adapter can support up to four CPUs. This is the only adapter which can exceed the one-to-one relationship between processors and adapters.

    e. A510 - FIPS Standard host interface. HYPERchannel component pricing is based upon the assumption that the maximum number of components to achieve the maximum discount have already been ordered.

13. Each HYPERchannel cabinet will accommodate up to three adapters. If TANDEM and Burroughs machines are greater than fifty feet apart, a HYPERchannel cabinet is needed for each machine. Coaxial cables in lengths from 500 to 5000 feet may be ordered as needed.

14. One patch panel cabinet is required for every ten patch panels (any type).

15. 6100 Communications Subsystem Base units come with a cabinet with room to accommodate fifteen Line Interface units (LIUs) and two Subsystem Base Add-on units. Each Subsystem Base Add-on unit can accommodate an additional fifteen LIUs. Three cable size options are available for connecting the 6100 Subsystem to hosts. Only the 60M option is ordered. Each Subsystem Base unit and Add-on unit requires two cables.

16. One TANDEM HYPERchannel patch panel is required for every four TANDEM HYPERLINK controllers.

17. One tape controller is needed for every tape drive unit.

18. One LP/CR controller is required for every line printer, card reader or card reader punch unit.

19. All TANDEM 6530 CRTs are ordered with the word processing option.

20. One ASYNC patch panel is required for each ASYNC controller. An ASYNC controller supports two asynchronous ports. At least two ASYNC controllers are required for the OSP and for redundancy. Up to two ASYNC extension boards may be added to each ASYNC controller, if needed.

21. One SYNC patch panel is required for each BYTE SYNC controller. SYNC controllers are ordered in pairs for redundancy.

22. No SYNC patch panels are ordered for BIT SYNC controllers.

23. Communications patch panel/line monitor and ARCLI components are never ordered.

24. One FOX controller is required per node. A single FOX cable connects two nodes.

2. Software

Unique configuration heuristics described below apply to software line items.

1. All FDC software is purchased on a "per site" basis (i.e., pay for the first copy only at any site) and

ordered on a "per processor" basis. This requirement includes Batch, FDC System Utilities, FDC File Security System, FDC TPS SAS, System Card Reader Support and GFE Terminal Support packages.

2. TANDEM software is purchased and ordered on a "per processor" basis. This requirement includes GUARDIAN OS, ENCOMPASS, EXPAND and COBOL packages. TANDEM EXCHANGE RJE HASP software can not be ordered.

3. All 6100 software is ordered on a "per processor" basis. 6100 software versions must be indicated when ordering since versions differ for each site.

4. DDN Service Interface software is ordered on a "per site" basis. DDN Interface Protocol software is ordered on a "per processor" basis.

5. NETEX software packages (feature numbers 550801 through 551302) do not have any warranty period. No maintenance uplift factor should be applied to these software packages. NETEX software ordered will correspond to the NSC HYPERchannel adapters ordered. Pricing for Burroughs NETEX software is set at the maximum discount level. Pricing for TANDEM NETEX software is set at the third level. Pricing for all other NETEX software products are set at the first level.

6. Software maintenance is computed on a "per site" basis.

7. Block Structured Language (PASCAL) and FORTRAN may only be ordered for FMSO Sites 02 and 03.

8. Software components which are part of a bundled package may not be ordered separately.

9. FMSO Configuration Management and Query software may not be ordered.

10. T-TEXT software must consciously be ordered.

3. Manuals and Documentation

Four sets of manuals are available on the SPLICE contract. A predetermined number of manuals has been identified for each site. This predetermined figure is an

element of the input configuration file. Nevertheless, the actual number of manuals desired for a site must be specified during configuration processing. This is necessary since sites may not require the predetermined quantity on the first delivery.

4. Training

Training was originally planned to be ordered on a group basis. Several individual courses may be ordered either in addition to or in lieu of the group package. Such an option is supported for the following courses:

1. Hardware Overview
2. Systems Resource Management
3. Systems Tuning and XRAY
4. Data Communications
5. TANDEM Applications Language (TAL)

The addition of courses in the future will require the modification of source code and the input cost data file. This action will only apply to courses ordered on a unit basis.

5. Maintenance

Maintenance is configured on a component and monthly unit basis with few exceptions. If the normal maintenance option is selected, preventive maintenance and on-call maintenance options have zero values for both quantity and cost. If the normal maintenance is not selected, preventive

and on-call maintenance options are assigned values according to the SPLICE contract. Emergency Per-Call maintenance is specified on an hourly basis. Months of component maintenance varies based upon the warranty period specified in the SPLICE contract.

6. Other

Site Preparation (initial site preparation and installation survey) charges must be specified during the configuration process if desired.

7. Discount and Escalation Rates

Discount and escalation rates specified in the SPLICE contract vary at predetermined levels. These rates vary based upon either elapsed time relative to the contract award date or the quantity of line items ordered. The discount and escalation rates applied to line items during the configuration process must be explicitly specified. The rates entered are added to a value of one to generate the appropriate multiplication factor. Discount rate entries must be entered as negative amounts. The multiplication factor is then applied to a basic rate obtained from an input cost data file.

The heuristics described above apply to contract line items of a fifteen year life cycle ADP contract. As ADP technology is ever and rapidly changing, new requirements and pricing options are negotiated between the

government and the vendor (FDC). Accordingly, modifications to these heuristics will be necessary on a continual basis.

III. METHODOLOGY USED TO DEVELOP THE SYSTEM

The idea to pursue the development of a micro-computer knowledge-based configuration system was fostered by the need to satisfy a group project for a course of instruction in decision support systems (DSS). A member of the group was the former FMSO SPLICE project manager. Familiar with the specifics of the SPLICE project and sensitive to the problems experienced by the NAVSUP SPLICE project management staff, he proposed the development effort. Development of the proposed system would satisfy two purposes:

1. the need to complete a group project for the DSS course
2. provide an automated micro-computer knowledge-based configuration system that would help alleviate some of the NAVSUP SPLICE project staff's work load. Additionally, the proposed system would yield a more accurate, consistent and reliable configuration process.

The initial proposal was to develop a knowledge-based configuration system. No follow on development was planned as part of the initial development. TURBO Pascal was selected as the programming language of choice for the following reasons:

1. all group members were familiar with the language as a result of exposure from a previous programming course
2. a structured programming language was desired for the development effort

3. a language which supported screen-oriented functions and color was desired

4. a language which provided quick response and ease of editing and compilation to reduce development effort and minimize frustration

Other programming languages could have satisfied item 2 through 4 requirements as well, but TURBO Pascal was chosen because of the overriding requirement of item 1. This requirement was felt to be of paramount importance due to the short development time frame involved for the course. Group members felt that familiarity with TURBO Pascal would allow the development effort to be modular and completed more rapidly. The system was completed and was forwarded to NAVSUP for evaluation and comment.

A follow on course of instruction dealing with software engineering methodologies was taken. A course requirement called for the development of a project using a structured software engineering approach to software development. Feedback from the NAVSUP SPLICE project staff was favorable. Comments received indicated a strong potential for the system to significantly improve the currently manual configuration process. Follow on group development of the project was initiated. The group discussed the merits of such a system and decided to pursue development employing the software engineering methodology taught in the course. Discussion for the remainder of this chapter will focus on the entire development effort from commencement of

development to completion of the integrated configuration management system.

A. PROTOTYPE

During the initial discussions and planning of the proposed configuration system, the major concern of group members was whether the vast number of heuristics involved in the configuration process could successfully be automated during the time frame of the course. In order to meet the completion deadline, the programming effort had to be divided between group members. The strategy employed was to break the system down into five basic functional areas. Each functional area would deal with each set of heuristics described in the previous chapter with only minor exceptions. The general heuristics had to be addressed for multiple areas and a few of the smaller areas were consolidated for development efficiency.

The group strategy was to start with the first group of heuristics (hardware) and proceed in an incremental fashion. Development effort would continue until either the prototype system was finished or until the project was due. Since there were so many heuristics involved and no formal structured design or engineering methodology was conducted, there was little certainty of how much of the system would be developed.

Development commenced with the general and hardware heuristics. Initially, development was extremely slow and difficult. General and hardware heuristics encompass the majority of the heuristics associated with the configuration process and are very complex. The incorporation of these areas into the system consumed the largest amount of time during the prototype development effort. Development continued sequentially by area until all areas had been addressed. As each area was implemented, development became easier as members gained confidence and heuristics became less complicated.

As mentioned in the introduction, the initial goal in the development effort was to make the system interactive and as user friendly as possible. The screen oriented features and functions of TURBO Pascal proved to be very beneficial in this endeavor. The use of colors for screen displays helped to differentiate input fields and prompts. The ability to move the cursor anywhere on the screen and control data entry, validation and error messages formats also aided in this effort.

Upon completion of the course, the prototype configuration system was forwarded to the NAVSUP SPLICE project staff for comments and recommendations. Project staff personnel expressed considerable interest in the prototype configuration system. While the configuration system was crude, project staff personnel were enthusiastic

about the potential benefits of the system. Discussions concerning their desire to incorporate other project management functions into the system were addressed.

B. SOFTWARE ENGINEERING METHODOLOGY

The software design course requirement to develop a software system using a structured methodology coincided closely with the receipt of the NAVSUP list of comments, recommendations and additional features. Further development of the system was accomplished using a programming team concept in conjunction with the software engineering methodology.

The software engineering methodology used in the development effort is a three phased structured approach encouraged by Pressman:

1. Planning - the definition, analysis, specification, estimation and review of a process. Planning provides a preliminary indication of project viability in relationship to cost and schedule constraints

2. Design - a process of applying various techniques and principles for the purpose of defining a device, a process, or a system in sufficient detail to permit its physical realization

3. Maintenance - the diagnosis and correction of errors (corrective); the modification of software to properly interface with a changing environment (adaptive); or the incorporation of recommendations for newer capabilities, modifications of existing functions, or general enhancements following the successful development of software (perfective)

Each phase of the structured methodology is designed to minimize the difficulties associated with the software development effort. [Ref. 2]

1. Planning

The first step of the software engineering methodology is the planning process. During this phase of software development, the group commenced the detailed planning of the functions that were to be incorporated into the system. Initial discussions centered around the level of complexity to be attempted for the course project. During these discussions, comments, recommendations and additional features provided by the SPLICE project staff were reviewed and scoped for level of complexity.

Initial planning efforts generated a proposal to develop an integrated interactive and user-friendly system that would be composed of three major functional modules:

1. Configuration module
2. Financial analysis module
3. Configuration Management System module that would support report generation

Detailed functions for each module were further specified. Individual member previous experience and strengths were evaluated. The group was organized into a programming team concept. Each member was assigned tasks which best corresponded to his level of experience and knowledge with respect to development tasks.

Once the system functional modules were identified, the next step involved the selection of software to implement the development effort. Based upon the effort that had been expended and the enthusiasm exhibited with the prototype development, a decision was made to continue development of the configuration module using TURBO Pascal. SCREEN SCULPTOR[3] was selected for the purpose of developing customized screens for the configuration module. It also employed a data entry and validation feature that could be incorporated into the configuration module with little effort. LOTUS 1-2-3 was selected as the software package for development of the financial analysis package. This selection was based upon the fact that the package was owned by a member of the group who was familiar and experienced in its use. dBASE III was selected for development of the Configuration Management module. Reasons surrounding this choice were:

1. the package was owned and readily available
2. it could be used as a shell to call and run other software packages from as well as perform the functions of configuration management using data base technology

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[3]SCREEN SCULPTOR is a software product available from The Software Bottling Company of New York, 6600 Long Island Expressway, Maspeth, NY 11378 (718) 458-3700. SCREEN SCULPTOR is a programming productivity tool that enables programmers to design and create input screens in minutes in either BASIC, IBM Pascal or TURBO Pascal.

3. FLASH CODE,[4] a commercial screen generation software package was available and could support the generation of customized screens and perform data entry validation for both dBASE II and dBASE III. The use of such a package would help minimize development effort and ensure correct data entry

4. dBASE III could support ten open files concurrently

5. no other data base management software package was available that either provided the capability to customize screens to the degree desired and support an interface to FLASH CODE

WORDSTAR was selected as the word processing software package that would be used to enable the user to view the User's Manual on-line. All packages with the exception of the two screen generation development packages were currently being used by SPLICE project staff personnel and required little investment in time to learn new packages or the outlay of funds.

Selection of the software packages posed some problems which had to be overcome prior to further development. LOTUS 1-2-3 and dBASE III both required special file formats and interfaces between input and output of each functional module. Special conversion procedures had to be developed to overcome these interface difficulties.

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[4]FLASH CODE is a software product available from The Software Bottling Company of New York, 6600 Long Island Expressway, Maspeth, NY 11378 (718) 458-3700. FLASH CODE is a programming productivity tool that provides dBASE II or dBASE III programmers the capability to use either screens or pop-up windows/help menus that instantaneously flash up on the screen.

The Pascal configurer module had to be developed to generate an output file that would allow the viewing and processing of both text and numerical fields when imported into LOTUS 1-2-3. The output file from the LOTUS 1-2-3 financial analysis module stripped off all text and header data following financial verification and saved as a ".PRN" data file. A dBASE III work data base had to be created using a structure that was compatible with the ".PRN" data file. This ".PRN" file was later appended to the dBASE III work data base and converted to a dBASE III data entry format.

With the module interfaces resolved, each functional module was further developed and refined to identify all data elements involved with the functional process. Data flow diagrams documenting all required data elements and processes were generated for each functional module. Two data flow diagrams are provided in Appendix B to serve as representative examples of this process. Each data flow, input file and functional process was further specified in detail through the use of various module descriptions. An example of each of these description modules is provided in Appendix B. The formats of each of the descriptions used in the definition process were modifications of formats specified in [Ref. 2] and [Ref. 3]. A Bachman diagram, supplied in Appendix B, was used to document the data base relationships associated with the configuration management

module. The generation of all functional module data interdependency charts signaled the completion of the planning phase.

2. Development

With the definition of all data element relationships, interdependencies and functional interfaces defined, the group commenced the development phase of the methodology. Using the data flow diagrams, data flow and process descriptions generated during the planning phase, each data process or bubble was decomposed into more detailed sub-functional processes.

Sub-functional processes were developed by exploding each bubble from the data flow diagram and decomposing the process to its lowest functional level through several layers of abstraction. The lowest levels of abstraction are procedure oriented and are stated in terms that can be directly implemented. Several guidelines for the process are involved and are outlined in Pressman [Ref. 2]. The overall objective of this decomposition process was to arrive at a description of each functional process to a level that would support modular development. Appendix B contains a few structure charts which are representative examples of the decomposition process.

The idea behind decomposing each process to its lowest functional description is to ensure that the scope of

effect[5] of a module is maintained within the scope of control[6] of that module [Ref. 2]. Another concept of the engineering methodology designed to aid in the development and maintenance of software systems is that of information hiding[7]. These concepts were applied to the design phase of development to ensure modularity of the system. The structure of the system was designed in a way that would facilitate future maintenance.

With all processes defined, team members began coding the various modules. Coding was accomplished in a top-down modular fashion to facilitate a phased implementation plan. As each module was completed, it was integrated into the overall system and tested to ensure accurate performance. Coding continued until the project was due for submission. At the end of the course, the configuration and financial analysis modules were complete. The third module, the data base configuration management system, had a basic structure that would support a minimal number of configuration reports. This module would be

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[5]Scope of effect of a module is defined as how other modules are affected by decisions which are made within the module. [Ref. 2: p. 170]

[6]Scope of control of a module is the number and degree of control which is exerted on other modules by the controlling module. [Ref. 2: p. 170]

[7]Information hiding is the concept whereby procedures and data information within a module are invisible to other modules. This concept helps achieve modularity during development. [Ref. 2: pp. 156-157]

finished as a follow on project under the maintenance phase. The system was forwarded to the SPLICE project staff for evaluation.

3. Maintenance

The structured design and development methodology employed in the development of the micro-computer knowledge-based integrated configuration management system proved to be very beneficial. Completion of the data base configuration management module was straight forward due to this design methodology.

The data base configuration management system was completed as a follow on project for a course of instruction in data base design. Since a foundation already existed as a result of the initial system development, continued development fell into the category of maintenance. The development of the configuration management module used three methods of maintenance. Each maintenance category is defined briefly in the methodology introductory discussion near the beginning of this chapter.

Continued development of the configuration management module was undertaken. Feedback from the SPLICE project staff highlighted errors which required correction - corrective maintenance. Also, due to contract negotiations and modifications, certain heuristics required modification - adaptive maintenance. Additionally, the data

base design course highlighted more efficient methods of accomplishing functional processes in lieu of methods used during the development phase of the system - adaptive and perfective maintenance.

The maintenance effort and system enhancements proposed by the NAVSUP SPLICE project staff were reviewed and evaluated for level of implementation difficulty. Each change was classified according to the type of maintenance involved. A development schedule was established and development effort continued.

The first maintenance actions addressed were corrective maintenance issues. Each potential error was evaluated in terms of its impact on the basic system structure. Errors were also evaluated in terms of whether the condition fell within the initial capabilities designed for the system. Some of the potential errors were found to be outside the scope of the initial design and were not attempted. SPLICE project staff personnel were informed of these conditions and were instructed on how to deal with the conditions.

Changes to the initial environment were addressed next. Contract negotiations are continuing and result in contract modification requirements. These modifications were evaluated to identify the degree of modification required to the basic system structure. While some modification was required, the majority of the changes

involved the configuration module. The decomposition of the logical functions to their lowest levels coupled with the high degree of cohesion[8] and low degree of coupling[9] of both modules and data made maintenance almost effortless.

The last maintenance area involved refining the methods by which tasks were performed. Knowledge gained from the data base design course identified more efficient means of accessing certain files. Also, certain initial relationships did not follow the relational normal forms associated with relational data base design [Ref. 4] and [Ref. 5]. Thus, certain files had to be restructured. Other changes involved eliminating unnecessary statements and optimizing certain functions, loops and file accesses. Modification of certain file accesses resulted in the reduction of response times in some cases by eighty to ninety percent.

Completion of the data base configuration management module marked the final development of the micro-computer knowledge-based interactive configuration management system for the SPLICE project. NAVSUP SPLICE project staff personnel have the system and are currently using the system

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[8]Cohesion is a measure of the relative functional strength possessed by a module (i.e. a cohesive module should only perform one thing or function) [Ref. 2: p. 158]

[9]Coupling is a measure of the relative interdependencies between modules (i.e., the degree to which other modules are dependent upon interfaces and data) [Ref. 2: p. 161]

for initial configurations. Once current sites under configuration are loaded to system data bases, sites previously configured will be loaded. The SPLICE project manager now has the capability to configure sites, perform financial and "what-if" analysis and generate a wide variety of reports to aid in the management of the project. The system report generation facility also enables the project manager to track components by serial number and location. The development of the micro-computer knowledge-based interactive configuration management system has provided the SPLICE project manager with the capability not only to evaluate overall project performance, but also to evaluate the contract vendor's performance with regard to contract requirements.

C. SUMMARY

The development of the micro-computer knowledge-based interactive configuration management system involved several different development methodologies. The success of its development could not have been realized without the inclusion of all methodologies.

Prototyping, while not a solution by itself, identified several problems with the original system design and data entry method. It also highlighted several areas which required modification to achieve the goal of developing a user-friendly system.

The execution of the software engineering methodology described by Pressman [Ref. 2] helped to identify all of the functional tasks for logical incorporation into the system. The use of the various module descriptions identified all of the essential data elements, flows and processes. The use of these descriptions further helped to minimize development time and prevent needless rework. Incremental implementation of completed modules kept the development effort on schedule. The use of commercially proven and tested "off-the-shelf" packages further helped to minimize the development effort.

The SPLICE micro-computer knowledge-based interactive configuration management system is an active system. As with any software system, maintenance must be performed to maintain the system current with its operational environment. The SPLICE configuration management system is no different. Due to a changing environment and requests for further enhancements to the system, a backlog of changes currently exists.

Due to the methodologies used in the design and development of the SPLICE configuration management system, the backlog and future changes should be able to be incorporated into the system with minimal confusion or effort.

IV. SYSTEM EXECUTION DIALOGUE

As discussed in previous chapters, the micro-computer knowledge-based configuration management system is an interactive and user-friendly system. Additionally, the system is an integrated system composed of three functionally separate modules:

1. configuration module - developed using TURBO Pascal
2. financial and "what-if" analysis module - developed using LOTUS 1-2-3
3. configuration management and report generation module - developed using dBASE III

Integration of the system was possible through dBASE III's ability to run other programs during system execution. This feature allowed dBASE III to be used as the shell or driver for the system.

Following discussions describe a typical system execution dialogue. All screen formats mentioned or referenced may be found in Attachment 2 of Appendix A. The system has no on-line help facility other than the on-line User's Manual. Review of the User's Manual may only be accomplished from the system's opening menu (Screen 1). Detailed information regarding system execution is addressed in Appendix A.

A. SYSTEM INITIATION

With initial installation complete and the target system's power on, type the command SPLICE at the DOS command prompt to initiate system execution. The first screen viewed is the Function Selection Menu - Screen 1. From this menu, the user may select any one of six possible options.

B. CONFIGURE A SITE

The first function normally performed would be to configure a site for SPLICE installation. This action is accomplished by selecting menu option 1 from the Function Selection Menu. Selection of this option invokes the Pascal Configuration Module. The user, having accumulated the applicable data for the site to be configured and recorded the information on a copy of Attachment 1 of Appendix A, would commence the configuration process.

The user would first see a module logo and version screen (Screen 2) followed by five data entry screens (Screens 3 through 8) and a final output screen (Screen 9) identifying the output file name to be imported into the financial analysis module. The data field sequence of Attachment 1 to Appendix A is in the sequence of data entries expected for screens 3 through 8.

Screen 3 is a list of designated SPLICE sites. Screens 4 through 8 are the applicable data entry screens. Data

entry is segmented into component and data types (ex: discount and escalation rates, hardware, software, etc.). The output data file name is presented as part of the final display to the configuration module (Screen 8). The output file is formatted for data entry into the financial analysis module. Following completion of the configuration process, the user is returned to the Function Selection Menu.

C. PERFORM FINANCIAL ANALYSIS ON SITE DATA

Financial analysis and delivery order preparation is the next function to be performed. Selection of menu option 2 from the Function Selection Menu invokes the execution of the financial analysis module using the LOTUS 1-2-3 system. The output file previously generated from the configuration module may then be viewed.

Several LOTUS macros, described in detail in Appendix A, enable the configuration module calculations and computations to be verified. "What-if" analysis may also be performed to evaluate the impacts of system costs relative to options selected and/or modify a system configuration to coincide with the current funding environment. Screen 13 is a partial example of how the data is presented in the financial analysis module. Upon completion of the configuration analysis, the data file is formatted for input into dBASE III data base files. Following financial

analysis termination, the user is returned to the Function Selection Menu (Screen 1).

D. INTERACT WITH THE CONFIGURATION MANAGEMENT AND REPORT GENERATION SUB-SYSTEM

Execution and interaction with the configuration management and report generation sub-system is invoked by selecting menu option 3 from the Function Selection Menu (Screen 1). The Process Selection Menu (Screen 14) is displayed and reveals nine additional options from which to choose.

1. Load New Delivery Order Data

The most common option to select will be menu option 1 - load the formatted file from the financial analysis module to the various data bases. The process is menu driven requiring answers to a few questions presented on screens 15 and 16. The data loading process adds new records to three data bases. If the input file is very large, the loading process may be lengthy.

Completion of loading data to the three data bases signals the interim completion of the configuration process for a site. No further data for the site may be loaded to the data bases until the equipment is received at the site. From this point, the user may return to the Process Selection Menu and obtain any of several reports extracted

in a variety of formats or return to the Function Selection Menu and choose another processing option.

2. Load Serial Number and Manual Data

Following the receipt of ordered components at the applicable site, the user may load the serial numbers of the hardware components and the names of the accompanying hardware and software manuals received. This function is a two step process.

Serial numbers may be loaded to the serial number data base by selecting menu option 6 from the Process Selection Menu, whereby the Serial Number Maintenance Menu (Screen 32) is displayed. Selection of menu option 1 results in the presentation of the Serial Number Update Format screen (Screen 33). To enter the applicable serial numbers, the user must provide the system with three data elements to load the serial number data:

1. site number
2. effective date of the applicable delivery order
3. feature number of the component

Once all three data elements have been entered, the serial number may then be entered. This process must be iterated for each serial number to be loaded to the data base. Since neither serial number nor manual information is available during the initial data load process, it is necessary to specify all three serial number data elements to ensure data

and file integrity. Following entry of the last serial number, the user terminates the update process by selecting the exit (X) option. This returns the user to the Serial Number Update Format screen (Screen 33). The user may either review the serial numbers just entered or return to the Process Selection Menu to initiate the loading of the applicable manual data.

Following entry of the serial number data, the applicable manual description data may be loaded to the Manual data base. This is accomplished by selecting menu option 5 from the Process Selection Menu, whereby the Manual Maintenance Menu (Screen 27) is displayed. To add manual descriptions to the manual data base, select menu option 1. The Manual Addition Format screen (Screen 28) is displayed. To enter the manual descriptions, first enter the applicable site number followed by the associated feature number for the manual description to be loaded.

Following entry of the last manual description, terminate the addition process by selecting the exit (X) option. This returns the user to the Manual Maintenance Format screen (Screen 27). The user may either review the manual descriptions just entered or return to the Process Selection Menu to initiate another process selection.

3. Generate a Maintenance Delivery Order

At the commencement of each fiscal year, the NAVSUP SPLICE project staff must initiate a delivery order to cover the maintenance and rental services for the current fiscal year for each configured SPLICE site. To accomplish this task, select menu option 8 from the Process Selection Menu (Screen 14). The Maintenance Delivery Order Generation Program screen (Screen 66) is presented and requires five inputs. First, the applicable site number for which the maintenance delivery is to be generated is entered. Then four discount or escalation rates are entered. These rates are based upon pre-determined terms negotiated in the SPLICE contract. These rates are based upon total number of components ordered and the elapsed time relative to the contract award.

A new formatted file (NEWDO.PRN) is generated to be imported into the financial module where computations and calculations are verified in the same manner discussed in section C above. Once the data has been verified financially correct in the financial module, the maintenance delivery order is ready to be printed. Program execution then automatically returns the user back to the Process Selection Menu where another process selection may be made.

4. Generate a Report

A variety of eight different reports are available from the report generation sub-system. Reports are available for:

1. the overall project
2. a particular site
3. a delivery order issued on a particular date

Within these categories, reports may further be broken down by:

a. equipment type
b. serial number

Delivery order equipment type reports may be obtained either with or without unit price data in the report.

The generation of any one of the eight available reports is obtained by initially selecting menu option 7 from the Process Selection Menu, whereby the Report by Type Menu (Screen 36) is displayed. Depending on the type of report desired, further menu options are selected. Screens 36 through 65 are examples of the various menus and report formats that are obtainable from the report generation system but are not discussed in detail.

E. REVIEW THE ON-LINE USER'S MANUAL

The on-line User's Manual may be viewed any time the user is viewing the Function Selection Menu (Screen 1). As stated before, no on-line help facility is available during

functional module execution. The on-line User's Manual uses WORDSTAR as the word processing package to display system execution instructions to the user. As such, the ability to jump to a specific page or process description does not exist. Following termination, the user is returned to the Function Selection Menu (Screen 1).

F. TERMINATE SYSTEM EXECUTION

When all system functions have been performed and the user desires to terminate system execution, two options are available. Menu options 5 and 6 on the Function Selection Menu (Screen 1) allow the user to either terminate system execution and return to the dBASE III environment (dot prompt) for further interactive queries or terminate system execution and return to the DOS operating environment. The most common selection will likely be to terminate system execution and return to the DOS operating environment.

V. COST BENEFIT AND EFFECTIVENESS

Prior to the development of the micro-computer knowledge-based integrated configuration management system for the NAVSUP SPLICE project staff, the first eight of a possible sixty-two initial site configurations were processed in a semi-automated fashion. While LOTUS 1-2-3 was used as the medium to produce the final form delivery order, a considerable amount of the heuristic processing still was manual. The developed system eliminates all such manual processing, except for gathering the initial sizing study input data.

Within the NAVSUP SPLICE project staff, one mid-grade GS-12 government employee is currently responsible for all SPLICE site configuration processing, project configuration management and vendor contract performance monitoring. Average annual salary for this grade level for a step five position is approximately thirty-six thousand dollars.

In the current phase of the project life cycle, sites are being configured for their initial equipment and associated software components. Existing sites with initial configurations require maintenance delivery orders generated to support continuing maintenance services on an annual basis. As mentioned in the introduction, errors discovered in delivery orders submitted to the vendor for processing

are corrected, with an additional charge[10] levied upon the government for the additional service. Due to the minimum number of sites that have been configured and are in operational status, there currently is little configuration management being performed.

To evaluate the benefit and effectiveness of the developed system, certain (worst case) assumptions are made:

1. based upon previous experience, each delivery order supplied to the vendor will contain errors
2. the government will incur a five thousand dollar additional charge for vendor corrections to **initial configuration** delivery orders containing errors
3. the government will incur a one thousand dollar additional charge for vendor corrections to **maintenance** delivery orders containing errors (no experience exists to evaluate the accuracy of this assumption and is therefore an anticipated worst case assumption)

Since only a few of the designated sites are currently operational, the one GS-12 employee has managed to keep pace with the work load. Without the development of the micro-computer knowledge-based integrated configuration management system, this effort would not be possible and

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[10]Charges of up to five thousand dollars per delivery order to correct existing errors have been experienced.

would most likely require the hiring of another lower grade employee on a full time basis[11] in the future.

During the next two calendar years, the remaining initial site configurations are going to be processed.[12] Figures based on the worst case assumptions stated above, suggest that the developed system has the potential to yield savings of close to two-hundred and fifty thousand dollars for the initial configuration process alone. Since each site must have a maintenance delivery order generated each fiscal year to account for increases or decreases in maintenance rates for services, the potential exists to realize additional savings of approximately sixty thousand dollars for each remaining year of the project life cycle.

The SPLICE contract contains predetermined discount and escalation rates which were negotiated and written into the contract. Certain discounts depend upon the quantity of components previously ordered and are graduated according to predetermined procurement levels. The ability of the GS-12 employee to currently identify these discount levels is

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[11]Once all SPLICE sites have been configured for initial equipment and component installation, configuration management within the project will come to the forefront. Due to the large number and variety of components that may exist for any site which can have an impact on the discounts that are applicable to component, this phase of contract monitoring and execution becomes critical in terms of cost effectiveness.

[12]Approximately twenty sites are scheduled for configuration during CY 1986 and approximately thirty sites are scheduled for configuration during CY 1987

accomplished solely through a manual process. Each delivery order previously issued has to be manually totaled to arrive at each component's project procurement total. Through the developed system's report generation facility, potential discounts can be identified in a matter of seconds. The potential savings that may be realized in this manner are difficult to quantify. I feel that it is safe to say that over the life cycle of the project, substantial savings as a result of this new capability can result.

The developed system provides the NAVSUP SPLICE project staff with the ability to monitor the vendor's performance relative to contract specifications and perform configuration management for the overall project. While the contract provided a configuration management package line item for these services, development of the system precludes the need to procure the option priced at roughly one-hundred thousand dollars.

The developed system provides the project staff with extensive capabilities needed to properly execute their functions as overseers of the contract and does so in an automated and efficient manner. These capabilities are believed to be developed to a level that will allow the existing project staff employee to perform these functions in roughly half the time experienced prior to system implementation. This increased efficiency should realize a

minimum savings of approximately eighteen thousand dollars each year for the project staff budget.

As seen from the above analysis, the development and implementation of the micro-computer knowledge-based integrated configuration management system for use by the NAVSUP SPLICE project staff provides a more efficient method with increased capability to effectively execute project manager responsibilities and monitor vendor performance. Potential savings realized through the use of this system will be at least eighteen thousand dollars annually for the next few years with the potential to save two-hundred and fifty thousand in the initial configuration process and sixty thousand dollars in annual maintenance modifications.

LIST OF REFERENCES

1. Naval Supply Systems Command Letter UNCLASSIFIED 0472/DAF 5232 Serial 1485U to Naval Data Automation Command (NAVDAC 12), Subject: Request for Life Cycle Management (LCM) Milestone III Approval of the Stock Point Logistics Integrated Communications Environment (SPLICE) Project (U), Enclosure (2), pp. 2-1 to 2-5, 1 March 1985.

2. Pressman, Roger S.. Software Engineering, McGraw-Hill, Inc. 1982.

3. Yourdan, E., and Constantine, L., Structured Design, Prentice-Hall, 1979.

4. Kroenke, David M., DATABASE PROCESSING: Fundamentals, Design Implementation, 2d ed., pp. 286-330, Science Research Associates, Inc., 1983.

5. Kent, William, "A Simple Guide to Five Normal Forms in Relational Database Theory," Communications of the Association for Computing Machinery, Vol. 26, No. 2, February 1983, pp. 120-125

APPENDIX A

THE NAVAL SUPPLY SYSTEMS COMMAND

STOCK POINT LOGISTICS INTEGRATED COMMUNICATIONS ENVIRONMENT

(SPLICE)

SYSTEM CONFIGURER AND CONFIGURATION MANAGEMENT SYSTEM

USER'S MANUAL

Document No. BBC - 01

1 January 1986

Record of Changes

Original	1 January 1986

List of Effective Pages

Page 1 through 44	Original
Page A1-45 through A1-49	Original
Page A2-50 through A2-83	Original
Page A3-84	Original

Acknowledgements

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Recognition

The development of the integrated SPLICE Configuration Management System involved several people. The effort devoted to the finished product was spread over a nine month period. The system was also used to satisfy project assignments in several core courses leading to the receipt of the Master of Science degree. Recognition is acknowledged for the persons listed below for their participation in the completion of the SPLICE Configuration Management System.

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1.0 Introduction.

This manual is designed to provide information and guidance to the SPLICE integrated system user. The integrated system components include: 1 - the SPLICE System Configurer, 2 - the LOTUS 1-2-3 financial and "what-if" analysis system, 3 - the dBASE III Configuration Management System, and 4 - the Wordstar on-line User's Manual.

1.1 Background.

The Naval Supply Systems Command (NAVSUP) conceived and developed the Stock Point Logistics Integrated Communications Environment (SPLICE) project. The SPLICE project purpose is to:

a. Provide state-of-the-art local and long haul telecommunications capabilities to 62 NAVSUP Stock Points.

b. Provide interactive and distributed ADP processing capabilities to SPLICE sites.

c. Provide capacity relief to aging Burroughs hosts at the Stock Points.

d. Standardize and upgrade, via mass replacement, the myriad of minicomputers existing at Stock Points.

NAVSUP initiated a competitive solicitation for "fault-tolerant" hardware and software to achieve these goals. The solicitation was completed in November 1983. The winning vendor, Federal Data Corporation (FDC), proposed TANDEM hardware and software to meet most of the solicitation processing and local communications requirements. FDC proposed Network System Corporation hardware and software to meet the local inter-host communications requirements.

1.2 Why The System Configurer and Configuration Management System.

Shortly after the SPLICE contract award, hardware and software components had to be ordered. NAVSUP faced a dilemma. Only a few SPLICE personnel had worked closely with the SPLICE acquisition benchmark and negotiations. These few people were the only personnel that had sufficient

knowledge of the systems to configure and generate delivery orders. These personnel developed initial orders by hand to meet the immediate need. Many minor errors were encountered with these initial orders. FDC corrected and returned the orders to the government and received additional compensation for their efforts.

This manual configuration process was later automated using a software product called SUPERCALC2. It has subsequently transitioned to LOTUS 1-2-3. The basic method of developing these orders remained virtually manual. These few SPLICE personnel, with FDC assistance, developed a series of "rules of thumb" used to configure individual site systems. Many of the original SPLICE group have moved on, taking their knowledge of the systems with them.

This SPLICE Configurer and Configuration Management System software is a knowledge based system designed to codify these "rules of thumb". This integrated system will enable NAVSUP to develop and maintain SPLICE configurations and delivery orders and perform configuration management on the project. Three software products were created in this phase of development to:

a. Configure initial SPLICE site systems by answering a series of questions. SPLICE.COM (written in TURBO Pascal) produces structured delivery orders that must be imported into LOTUS 1-2-3. LOTUS 1-2-3 performs financial review and analysis before loading the dBASE III Configuration Management data bases.

b. Restructure the SPLICE.COM output file into LOTUS 1-2-3 format. A series of macros assist in the regeneration of the delivery order into LOTUS standard formula format. Following the conversion, three options exist: 1 - print the delivery orders, 2 - prepare archival files, or 3 - prepare the output file needed for the dBASE III Configuration Management system.

c. Restructure the LOTUS 1-2-3 output file into dBASE III format. dBASE III command language modules import and convert the LOTUS output file into dBASE III format. They also either generate or update the three dBASE III Configuration Management data bases. This allows the user to generate selected configuration management reports from the three data bases. MAINTDO.PRG, a dBASE III module, generates maintenance delivery orders from the configuration management data bases. These maintenance delivery orders

must be imported into LOTUS 1-2-3 for final financial review and analysis.

2.0 Input Data.

The following paragraphs describe the integrated system data input requirements. The following discussion describes the files required to execute the system and the associated screen formats.

2.1 SPLICE System Configurer and Configuration Management System Files.

The SPLICE System Configurer and Configuration Management System can only be run on a hard disk system, with the following minimum files (refer to Attachment 3 for system installation procedures):

GROUP 1 FILE-IDs (SPLICE Configurer)

a. COSTS.IN
b. CONFIG.SIT
c. SPLICE.COM
d. SPLICE.SCR

GROUP 2 FILE-IDs (LOTUS 1-2-3 Financial Analysis)

e. 123.EXE (Associated files for LOTUS version 1A not shown but are also required.)
f. SKELETON.WKS
g. MAINTORD.WKS

GROUP 3 FILE-IDs (dBASE III Configuration Management System)

h. DBASE.COM (Associated files for dBASE III version 1.1 not shown but are also required.)
i. CONFIG.DBF
j. CONFIG.NDX
k. CONFMOD.PRG
l. CONFREV.PRG
m. CONFUPD.PRG
n. DATERPTS.PRG
o. DELAY.PRG
p. DESCRIP.DBF
q. DESCRIP.DBT

r. DESCRIP.NDX	s. DESCRIPT.SCR	t. DESPMOD.PRG
u. DESPPREV.PRG	v. DESPPUPD.PRG	w. EFEAT.NDX
x. EQPDTNPC.PRG	y. EQPDTPRC.PRG	z. EQPPJRPT.PRG
aa. EQPSTRPT.PRG	bb. EQUIP.DBF	cc. EQUIPCMD.PRG
dd. EQUIPDAT.NDX	ee. EQUIPPRJ.NDX	ff. EQUIPREV.PRG
gg. EQUIPREV.SCR	hh. EQUIPSD.NDX	ii. EQUIPSIT.NDX
jj. EQUIPUPD.PRG	kk. EQUIPUPD.SCR	ll. FLASHUP.COM
mm. MAINMENU.PRG	nn. MAINMENU.SCR	oo. MAINTDO.PRG
pp. MAINTDO.SCR	qq. MANUAL.DBF	rr. MANUALS.SCR
ss. MANULADD.PRG	tt. MANULCMD.PRG	uu. MANULDEL.PRG
vv. MANULREV.PRG	ww. MANULSIT.NDX	xx. MANULUPD.PRG
yy. MKLABELS.PRG	zz. MKLABELS.SCR	aaa. MNLSTRPT.PRG
bbb. NEWDOADD.PRG	ccc. NEWDOCMD.PRG	ddd. NEWDOCVT.PRG
eee. NEWDOCVT.SCR	fff. PROJRPTS.PRG	ggg. REPORCMD.PRG
hhh. REPORTS.SCR	iii. SELECTOR.PRG	jjj. SELECTOR.SCR
kkk. SERIALNO.DBF	lll. SERIALNO.SCR	mmm. SERNOBLD.PRG
nnn. SERNOCMD.PRG	ooo. SERNODAT.NDX	ppp. SERNOFEA.NDX
qqq. SERNOPRJ.NDX	rrr. SERNOREV.PRG	sss. SERNOSIT.NDX
ttt. SERNOUPD.PRG	uuu. SITENAME.SCR	vvv. SITERPTS.PRG
www. SNODTRPT.PRG	xxx. SNOPJRPT.PRG	yyy. SNOSTRPT.PRG
zzz. SPLICE.BAT	aaaa. SPLICE.WIN	bbbb. TED.DBF
cccc. NEWJOIN.DBF		

Several of the dBASE III command language modules require considerable time to execute. An IBM-PC/XT operating with a clock speed of 6 MHz or greater or IBM-PC/AT provides better performance.

Three additional TURBO Pascal source code files are provided since the Configurer system was developed in Borland International's **TURBO Pascal** and Software Bottling Company's **SCREEN SCULPTOR**[1]:

GROUP 1 FILE-IDs

a. SPLICE.PAS b. SPLICE1.PAS c. SPLICE2.PAS

GROUP 1 files must reside on a subdirectory named \TURBO. GROUP 2files must reside on a subdirectory named \LOTUS. Group 3 files must reside on a subdirectory named \DBASEIII. The file USERS.MAN must be present on a subdirectory named \WORDSTAR if the User's Manual is viewed on-line (Function Selection Menu option 4). A version of WORDSTAR must also exist on the subdirectory.

Software Bottling Company product **FLASH CODE**[2] must be purchased to run the dBASE III Configuration Management System. All command language modules in the dBASE III Configuration Management System use a memory resident program FLASHUP.COM. FLASHUP[3] gives dBASE III the extra capabilities of instantly flashing up screens and instantly popping up windows. Load this command module into the computer memory before running dBASE. The SPLICE.BAT

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1 SCREEN SCULPTOR is a software product available from The Software Bottling Company of New York, 6600 Long Island Expressway, Maspeth, NY 11378 (718) 458-3700. SCREEN SCULPTOR is a programming productivity tool that enables programmers to design and create input screens in minutes in either BASIC, IBM Pascal or TURBO Pascal.

2 FLASH CODE is a software product available from The Software Bottling Company of New York, 6600 Long Island Expressway, Maspeth, NY 11378 (718) 458-3700. FLASH CODE is a programming productivity tool that provides dBASE II or dBASE III programmers the capability to use either screens or pop-up windows/help menus that instantaneously flash up on the screen.

3 FLASHUP is a memory resident program supplied with FLASH CODE that enables dBASE II or dBASE III programmers to use screens and pop-up windows/help screens which instantly flash up on the screen rather than the dBASE painting method.

command batch file automatically accomplishes this process. FLASHUP is licensed to individuals for use along with either dBASE II or dBASE III programs and may be moved from one computer to another. Any number of people may use FLASHUP, providing there is no possibility of using it concurrently in two or more locations.

Both Software Bottling Company products, **SCREEN SCULPTOR** and **FLASH CODE** must be purchased to perform system maintenance on system screens and windows.

2.2 System Preparations.

Fill out a copy of Attachment 1 before executing the SPLICE Pascal Configurer and Configuration Management System modules. Having this information before beginning a session will greatly facilitate system use.

Turn on the IBM-PC AT target system and the 132 column printer's power. Ensure that the minimum required software listed above is loaded on the active hard disk subdirectories specified. Make subdirectory \DBASEIII the default directory.

2.3 System Execution.

Execute the SPLICE Pascal Configurer and Configuration Management System by entering the command SPLICE at the system prompt (ex: C>SPLICE).

Several copyright notices will appear on the screen after a few seconds delay for system startup. The processes described below are then available: (See Attachment 2 for screen formats).

Screen 1: The Function Selection Menu is the opening screen for the integrated system. Six options exist from which to choose. Option 1 permits the configuration of a SPLICE site. Option 2 uses LOTUS 1-2-3 to perform financial or "what-if" analysis. Option 3 opens the dBASE III SPLICE Configuration Management System. Option 4 reviews the User's Manual on-line. Option 5 returns the system to the dBASE III system prompt. Option 6 returns the system to the DOS prompt. The following discussion is limited to options 1 through 4. Only entries in the range 1 - 6 are valid. The default value is 1.

2.3.1 FUNCTION 1: Execute the Pascal Configurer

Select option 1 (from the Function Selection Menu - Screen 1) to configure a SPLICE site. If the Function Selection Menu is not displayed, select the "Return to " option of the current menu until the Function Selection Menu appears. If a process is active, select the option that terminates the process. Once a menu appears, select the "Return to " option of the current menu until the Function Selection Menu appears. Select option 1 when the Function Selection Menu appears. The first screen of the SPLICE Pascal Configurer (Screen 2) appears.

Screen 2: The opening screen of the Pascal configurer module requires no input.

Screen 3: A list of sites which may be configured appears. Insert an integer value between 01 and 58 to select a currently designated site. Site numbers 59 through 62 are reserved for future designation. Site Number 23 (NAS Oceana) is deactivated and no longer is a designated SPLICE site.

Screen 4: Enter the discount and escalation rates, output file name, number of months of maintenance, and effective delivery order date. Data input ranges apply as described below:

a. FDC SNA Interface Discount Rate: 0.00 - 9.99

b. Non-LCN Purchase Discount Rate: 0.00 - 9.99

c. LCN Purchase Discount Rate: 0.00 - 9.99

d. SPLICENet Software Maintenance Discount Rate: 0.00 - 9.99

e. SPLICENet Software Purchase Discount Rate: 0.00 - 9.99

f. Emergency Maintenance Escalation Rate: 0.0 - 9.9

g. LCN Hardware Maintenance Escalation Rate: 0.000 - 9.999

h. LCN Software Maintenance Escalation Rate: 0.000 - 9.999

i. Installation Escalation Rate: 0.000 - 9.999

j. Training Escalation Rate: 0.00 - 9.99

k. Documentation Escalation Rate: 0.00 - (-9.99)

l. Maintenance Escalation Rate: 0.000 - 9.999

m. Output file name: any 8 alphanumeric characters

n. Hardware Maintenance Months: 0 - 12

o. Effective Date: 01/01/84 - 12/31/99

On entry of the effective date, confirm the input values by entering a "Y" to the prompt " Do you accept the input values thus far? Yes or No ". **The Default value is "N".**

Screen 5: Enter the hardware quantities suggested by the Navy Fleet Material Support Office Sizing Study, as transcribed to Attachment 1. The following data input ranges apply:

a. Processors: 0 - 256

b. Centronics Printers: 0 - 12

c. TANDEM CRTs: 0 - 999

d. 128 MB Disks: 0 - 128, in **EVEN** quantities

e. 240 MB Disks: 0 - 128, in **EVEN** quantities

f. 540 MB Disks: 0 - 128, in **EVEN** quantities

g. Non-6100 ASYNC Controllers: 0 - 64. There should be **at least two in the initial order** for each OSP; subsequent quantities are at the user's discretion.

h. Non-6100 ASYNC Extension Boards: 0 - 2

i. Bit SYNC Lines: 0 - 128

j. Byte SYNC Lines: 0 - 128

k. Tri-Density Tape Drives: 0 - 128

l. Reader/Punches: 0 - 12

m. Card Readers: 0 -12

n. 1000 LPM Printers: 0 - 16

o. 600 LPM Printers: 0 - 16

p. LCN Coaxial Cables (Trunks): 0 - 2. Input is only allowed for sites designated in file CONFIG.SIT as Stock Points (S).

q. 6100 Line Interface Units (LIUs): 0 - 256

r. LCN Interface Adapters (multiple entries): 0 - 256. Input is only allowed for sites designated in file CONFIG.SIT as Stock Points (S).

s. Cabinets: 0 - 16 for computed; 0 - 8 for extra. The system computes the required numbers for the 4 types of cabinets and presents this in the COMP field. Additional quantities may be entered in the XTRA field within the allowed ranges specified above as desired.

t. Max Distance Between Computers: A - F. Input is only allowed for sites designated in file CONFIG.SIT as Stock Points (S).

On completion of the Max Distance input value, confirm the input values by entering a "Y" to the prompt " Do you accept the input values thus far? Yes or No ". **The default value is "N".**

Screen 6: Select various software packages and the number of both NETEX and SPLICENet software maintenance months desired. The system only accepts "Y" or "N" entries for software packages. The system only accepts integers in the range 0 - 12 for software maintenance months entries. Network Maintenance Facility (NMF) software is divided into either a group package or individual packages. If the user selects the group package, none of the individual packages can be selected. The cursor moves directly to the NETEX Maintenance Months field. If the NMF group package field response is "N", the user may select each individual package if desired. On completion of the entry for the number of months of SPLICENet software maintenance desired, confirm the input values by entering a "Y" to the prompt " Do you

accept the input values thus far? Yes or No ". **The default value is "N".**

Screen 7: Enter the quantities for system documentation, training group and courses, and months of Emergency Per-Call Maintenance. Indicate whether to include Site Preparation charges.

The allowable range for documentation and training courses is 0 - 20. The allowable range for Training Groups is 1 - 5. The allowable range for months of Emergency Maintenance is 0 - 12. The allowable inputs to Site Prep charges are "Y" or "N". On completion of the Site Prep charges, confirm the input values by entering a "Y" to the prompt " Do you accept the input values thus far? Yes or No ". **The default value is "N".**

Screen 8: The configurer software module sign-off screen requires no input. The system displays the output file name used for this configuration run in the sign-off message.

The system returns to the Function Selection Menu (Screen 1) to await the next selection.

2.3.2 FUNCTION 2: Perform LOTUS 1-2-3 Financial or "What-If" Analysis

Discussion of the following actions is predicated on the user having a well developed understanding of the LOTUS 1-2-3 system. Terminate the system and review any of several available books detailing the system's capabilities and operations before continuing if you are not familiar with that software product.

Select option 2 to begin LOTUS 1-2-3 financial or "what-if" analysis processing. Insert a LOTUS system disk in drive A (or have a product such as ZERODISK[4] installed) to start the LOTUS system. If the Function Selection Menu is not displayed, select the "Return to " option of the current menu until the Function Selection Menu appears. If

4 ZERODISK is a software product available from Quaid Software Limited, 45 Charles Street East, Third Floor, Toronto, Ontario M4Y 1S2 (416) 961-8243. It is a product that enables users to run software applications without the need to place master disks in the "A" drive required by some programs such as dBASE III, LOTUS 1-2-3, etc.

a process is active, select the option that terminates the process. Once a menu appears, select the "Return to " option of the current menu until the Function Selection Menu appears. Insert a LOTUS system disk in drive A and then select option 2 when the Function Selection Menu appears.

Following a message concerning changing the LOTUS active file directory, the first screen of the LOTUS 1-2-3 system (Screen 9 - See Attachment 2 for screen formats) appears. The system experiences a few seconds delay for system startup.

NOTE: a backslash (\) followed by a single letter indicates a LOTUS macro. Execute a macro by simultaneously depressing the ALT and letter keys. A slash (/) followed by a letter indicates a LOTUS command. **[CR]** denotes the striking of the RETURN or ENTER key.

Screen 9: The opening menu of the LOTUS 1-2-3 system requires no input. Processing continues with the depression of any key.

Screen 10: The empty LOTUS 1-2-3 spreadsheet screen appears. Change the default subdirectory in LOTUS if it is not subdirectory C:\DBASEIII. Enter LOTUS command /WGDDC:\DBASEIII**[CR]**Q to change the default subdirectory. Enter LOTUS command /FR to retrieve a file. Screen 11 appears. Use the arrow keys to point to SKELETON or MAINTORD or type either SKELETON or MAINTORD. SKELETON.WKS is the formatting file for outputs from the Pascal Configurer module. This file includes the macros developed for recalculation analysis beginning in cell A200. MAINTORD is the formatting file for outputs from the Maintenance Delivery Order Generation module executed from within the dBASE Configuration Management System. This file includes macros similar to those beginning in cell A200 of file SKELETON.WKS. If the user selects the SKELETON worksheet, Screen 12 - the formatted spreadsheet, appears.

Screen 13: Enter the LOTUS command /FIN{file name} or the macro \F{file name} to begin the importation process. Enter an output file name generated by the Pascal Configurer module. It may either be typed in without the ".PRN" extension or selected by pointing to the file name with the arrow keys.

No further screens for the LOTUS processes are shown here. All screens appear the same, showing different views of the memory resident spreadsheet.

The following LOTUS macros in file SKELETON.WKS have been provided for easier processing:

a. \C - Changes column numeric entries to currency. Execute the macro anywhere in the worksheet.

b. \D - Deletes indicated rows. Place the cursor at the first row to delete before entering \D. Point to the last row to delete using the arrow keys.

c. \E - Deletes all ".PRN" files. Execute the macro anywhere in the worksheet.

d. \F - Imports a ".PRN" file at the cursor position. Execute the macro anywhere in the worksheet.

e. \I - Recalculates the Total Component Installation Price for a row. Place the cursor in the top row cell of the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \I.

f. \M - Recalculates the Total Component Purchase Price for a row. Place the cursor in the top row cell of the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \M.

g. \N - Recalculates the Total Hardware Component Maintenance Price for a row. Place the cursor in the top row cell of the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \N.

h. \O - Recalculates the Total Software Component Maintenance Price for a row. Place the cursor in the top row cell in the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \O.

i. \P - Prepares the worksheet for output to the dBASE process. Execute the macro anywhere in the worksheet.

j. \R - Names a macro. Execute the macro in the cell of the new macro identifier.

k. \S - Sum indicated columns. Execute the macro from the cell where the total figure is desired. Use arrow keys, followed by the RETURN or ENTER key, to indicate the beginning and end of the summary area.

l. \T - Recalculates the Component Downtime hourly rate. Place the cursor in the top row cell in the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \T.

m. \U - Recalculates the Component System Downtime hourly rate. Place the cursor in the top row cell in the newly created temporary column (e.g., hardware, software, etc.). Copy subsequent entries using /C versus using \U.

Perform formula recalculation one column at a time starting from the left. Insert a new column to the left of the Total Purchase Price, Total Component Maintenance, Total Installation Price, and two Downtime Credit columns. Execute the \M, \N, \O, \I, \T, and \U macros described above in the first entry of each applicable column. Copy the resulting formula down the remainder of the column. Sum the column using the \S macro. When results are satisfactory, move (/M) the new column over the old column and delete (/WDC) the now blank column. Re-sum (no macro provided) the summary financial data at the bottom of the spreadsheet.

Perform "what-if" analysis, using the macros provided, following formula recalculation. **Exercise extreme care when changing component quantities!** If component quantity changes are made, print and review the proposed changes. After reviewing the changes, reverify the accuracy of the changes using the Configurer system. Use the Configurer to ensure that all configuration rules are properly followed.

Save an archival copy of the worksheet with the /FS{file name} command. Print a delivery order with the /PP command. Strip off the worksheet headers, non-hardware and software line items, section cost totals, summary notes and cost information with the \D macro. Print the remaining contents of the spreadsheet (less macros) with the /PF{file name} command or \P macro.

Terminate 1-2-3 by entering the LOTUS command /QY[CR]. The system returns to the Function Selection Menu (Screen 1) to await the next selection.

The following processing is accomplished if the file MAINTORD is selected. The system automatically loads the NEWDO.PRN file created from the dBASE III Maintenance Delivery Order Generation module. The cursor moves to the appropriate field to accept entry of the effective date. Use the macros stored at location A200 to verify and complete the maintenance delivery order following entry of the effective date.

The following LOTUS macros on MAINTORD.WKS have been provided for easier processing:

a. \C - Copies header information.

b. \D - Deletes the first column.

c. \0 - Automatically imports the maintenance delivery order called NEWDO.PRN.

d. \I - Adds rows for software headers.

e. \N - Recalculates the Total Hardware Component Maintenance Price for a row. Place the cursor in the top row cell in the newly created temporary column (i.e., hardware and software). Copy subsequent entries using /C versus using \N.

f. \O - Recalculates the Total Software Component Maintenance Price for a row. Place the cursor in the top row cell in the newly created temporary column (i.e., hardware and software, etc.). Copy subsequent entries using /C versus using \O.

g. \R - Names a macro. Execute the macro in the cell of the new macro identifier.

h. \S - Sum indicated columns. Execute the macro from the cell where the total figure is desired. Use arrow keys, followed by the RETURN or ENTER key, to indicate the beginning and end of the summary area.

Locate the first software item in the body of the spreadsheet (feature number between 510101 and 660101, 860101 or 860201). Move the cursor to the corresponding location in column "A". Execute the \I macro to insert blank rows at the location. When complete, move the cursor down 4 rows and execute the /C LOTUS command to copy headers to the beginning of the next section.

Verify the calculated Component Factored Maintenance cell for each data entry. Move the cursor to the first entry in the hardware section of the Component Factored Maint column and execute the command /WIC**[CR]**. This will add an additional column to the spreadsheet. Execute macro \N to automatically recalculate the maintenance amount at the first hardware component cell. Execute the LOTUS command /C**[CR]**{DOWN}.{DOWN to the end of the hardware column}**[CR]**. This copies the formula in the first cell to all following cells. Use the \S macro to sum the column and copy the same formula to the next cell to the right with the /C LOTUS command.

Comparison of these two sums may show minor rounding differences. Use the /M command to move the desired cells one column to the right to retain the LOTUS figure. Use the same procedure in the software section, substituting the \O macro for the \N macro. Delete the unnecessary column with the /WDC command following the movement of the data to the newly created column.

When validation of all entries is complete, manually enter financial appropriation data and end of delivery order comments. Manually recalculate a new System Downtime Credit Factor value using data supplied on the spreadsheet plus the installation cost. Save or print the new delivery order, as desired.

Terminate LOTUS 1-2-3 by executing the LOTUS command /QY**[CR]**. The system returns to the Function Selection Menu (Screen 1) to await the next selection.

2.3.3 FUNCTION 3: Execute the dBASE III Configuration Management System

Select menu option 3 (from the Function Selection Menu - Screen 1) to invoke the dBASE III Configuration Management System. If the Function Selection Menu is not displayed, select the "Return to " option of the current menu until the Function Selection Menu appears. If a

process is active, select the option that terminates the process. Once a menu appears, select the "Return to " option of the current menu until the Function Selection Menu appears. Next select menu option 3. The first screen of the dBASE III Configuration Management System (the Process Selection Menu - Screen 14) appears.

Screen 14: Ten menu options (0 - 9) exist. Processing continues based on the selection entered. Option 0 returns the system to the Function Selection Menu (Screen 1). The remaining options are discussed in order.

2.3.3.1 Load a new Delivery Order into the Configuration Management System.

Select menu option 1 (from the Function Selection Menu - Screen 1) to load a new delivery order generated by the SPLICE Configurer. The Delivery Order Load Menu (Screen 15) appears. Next select menu option 1 to commence the loading process for the new delivery order.

Screen 15: Select one of two options: 1 - load a new delivery order or 2 - return to the Process Selection Menu (Screen 14).

Screen 16: Enter the LOTUS output file name. A file name may be from one to eight alphanumeric characters long. The default file name supplied by the system is "SPLICE.PRN". The system automatically provides the extension. If the file name entered cannot be found on the default subdirectory, re-enter a valid name. An error message appears on the status line if the file name entered cannot be found. After three invalid entries, either exit the program or supply another file name. When a valid file name is supplied, enter the effective date for the delivery order.

Valid dates range from 840101 to 991231 **(the system currently will not accept leap year dates - 29 February).** The actual site number from the input delivery order appears following the entry of a valid date. The user may change the site number to any site number within the range 01 - 58 or accept the site number displayed. Following the entry of a valid site number, accept all data entries before the load process begins. If the response is "N", all data entries are erased and the input process is repeated. If the response is "Y", indicate input file disposition: 1 - retain or 2 - erase.

The update process commences following this response. The load process may take up to 10 minutes. This is primarily due to the building of serial number records for each individual component on the delivery order. **BE PATIENT.** During the load process, status messages appear to keep the user appraised of the transactions as they occur. When the load process finishes, indicate whether to load another delivery order. If the response is "Y", the process starts with a new Screen 16. If the response is "N", the system returns to the Delivery Order Load Menu (Screen 15). Select menu option 2 to return to the Process Selection Menu (Screen 14) to await the next selection.

2.3.3.2 Perform maintenance on the Equipment File.

Select menu option 2 (from the Process Selection Menu - Screen 14) to either modify or review records in the Equipment File. Following the selection of option 2, the Equipment Maintenance Selection Menu (Screen 17) appears.

Screen 17: The Equipment Maintenance Selection Menu enables the user to review or modify selected entries in the Equipment File. Select one of three options: 1 - update price information; 2 - review equipment file entries; or 3 - return to the Process Selection Menu (Screen 14).

2.3.3.2.1 Modify an Equipment File Record.

Select menu option 1 (from the Equipment Maintenance Selection Menu - Screen 17) to modify an Equipment File record. Following the selection of option 1, the Equipment Update Format screen (Screen 18) appears.

Screen 18: Enter the site number to update, an integer from 01 to 58.

Select one of three options: 1 - update a specific site's records; or 2 - start at the beginning of the Equipment File; or 3 - start at the end of the Equipment File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to modify records for a specific site.

Following entry of the specified site number, two options exist: 1 - select a specific six digit feature number or 2 - start with the first feature number by entering "00 " **(two zeroes followed by four spaces).** Status messages appear at the bottom of the screen when reaching the first and last records. This action only occurs if a specific site is selected (a site selection other than "00" or "99").

The only authorized changes in this screen are the three price fields. An introductory window, explaining how to terminate the modification of a record field, appears following the entry of a feature number. Terminate the introductory information window by striking the RETURN or ENTER key. Changes to fields are possible one field at a time. If changes are made to any field, either accept or reject the changes. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Equipment Maintenance Selection Menu (Screen 17).

2.3.3.2.2 Review an Equipment File Record.

Select menu option 2 (from the Equipment Maintenance Selection Menu - Screen 17) to review an Equipment File record. Following the entry of option 2, the Equipment Review Format screen (Screen 19) appears.

Screen 19: Enter the site number to review, an integer from 01 to 58.

Select one of three options: 1 - review a specific site's records; or 2 - start at the beginning of the Equipment File; or 3 - start at the end of the Equipment File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to review records for a specific site.

Following the entry of specified site number, two options exist: 1 - select a specific six digit feature number or 2 - start with the first feature number by entering "00 " **(two zeroes followed by four spaces).** Status messages appear at the bottom of the screen when reaching the first and last records. This action only occurs if a specific site is selected (a site selection other than "00" or "99").

No changes are allowed in this screen. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the review process. On exiting, the system returns to the Equipment Maintenance Selection Menu (Screen 17).

2.3.3.3 Perform Maintenance on the Equipment Description File.

Select menu option 3 (from the Process Selection Menu - Screen 14) to either modify or review records in the Equipment Description File. Following the selection of option 3, the Equipment Description Maintenance Menu (Screen 20) appears.

Screen 20: The Equipment Description Maintenance Menu enables the user to review or modify selected entries in the Equipment Description File. Select one of three options: 1 - modify Equipment Description File entries; 2 - review Equipment Description File entries; or 3 - return to the Process Selection Menu (Screen 14).

2.3.3.3.1 Modify an Equipment Description File Record.

Select menu option 1 (from the Equipment Maintenance Selection Menu - Screen 17) to modify an Equipment Description File record. After the selection of option 1, the Description Update Format screen (Screen 21) appears.

Screen 21: Enter: 1 - "00 " **(two zeroes followed by four spaces)** to start the update process at the top of the file; 2 - "99 " **(two nines followed by four spaces)** to start at the update process the end of the file; or 3 - a six digit feature number. Valid feature numbers range from 000101 to 994001.

An introductory window, explaining how to terminate the modification of a record field, appears following the entry of a feature number. Terminate the introductory information window by striking the RETURN or ENTER key. Changes to fields are possible one field at a time.

All data entries in this screen may be modified. Once the Base Maintenance Price field is either modified or passed, the user may update the memo field. If the response is "Y", a window of instructions (Screen 22) appears. The

instructions describe how to make changes to the memo field. If the response is "N", processing continues.

Accept or reject changes made to any field. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Equipment Maintenance Selection Menu (Screen 17).

2.3.3.3.2 Review an Equipment Description File Record.

Select menu option 2 (from the Equipment Maintenance Selection Menu - Screen 17) to review an Equipment Description File record. After the selection of option 2, the Description Review Format screen (Screen 23) appears.

Screen 23: Enter either: 1 - "00 " **(two zeroes followed by four spaces)** to start the update process at the top of the file; 2 - "99 " **(two nines followed by four spaces)** to start at the update process the end of the file; or 3 - a six digit feature number. Valid feature numbers range from 000101 to 994001.

No changes are allowed in this screen. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the review process. On exiting, the system returns to the Equipment Maintenance Selection Menu (Screen 17).

2.3.3.4 Perform Maintenance on the Site Name File.

Select menu option 4 (from the Process Selection Menu - Screen 14) to either modify or review records in the Site Name File. Following the selection of option 4, the Site Name Maintenance Menu (Screen 24) appears.

Screen 24: The Site Name Maintenance Menu enables the user to review or modify selected entries in the Site Name File. Select one of three options: 1 - modify Site Name File entries; 2 - review Site Name File entries; or 3 - return to the Process Selection Menu (Screen 14).

2.3.3.4.1 Modify a Site Name File Record.

Select menu option 1 (from the Site Name Maintenance Menu - Screen 24) to modify a Site Name File record. After the selection of option 1, the Site Address Data Update Format screen (Screen 25) appears.

Screen 25: Enter the site number to update, an integer from 01 to 58.

Select one of three options: 1 - update a specific site's records; or 2 - start at the beginning of the Site Name File; or 3 - start at the end of the Site Name File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to modify records for a specific site.

All data entries, except site number and type activity, may be changed. An introductory window, explaining how to terminate the modification of a record field, appears following the entry of a feature number. Terminate the introductory information window by striking the RETURN or ENTER key. Changes to fields are possible one field at a time. Accept or reject changes made to any field. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Site Name Maintenance Menu (Screen 24).

2.3.3.4.2 Review a Site Name File Record.

Select menu option 2 (from the Site Name Maintenance Menu - Screen 24) to review a Site Name File record. Following the selection of option 2, the Site Address Data Review Format screen (Screen 26) appears.

Screen 26: Enter the site number to review, an integer from 01 to 58.

Select one of three options: 1 - review a specific site's records; or 2 - start at the beginning of the Site Name File; or 3 - start at the end of the Site Name File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file.

Enter "99" to start viewing records at the end of the file. Enter the site number to review records for a specific site.

No data entries may be changed in this screen. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Site Name Maintenance Menu (Screen 24).

2.3.3.5 Perform Maintenance on the Manual File.

Select menu option 5 (from the Process Selection Menu - Screen 14) to either modify or review records in the Manual File. Following the selection of option 5, the Manual Maintenance Menu (Screen 27) appears.

Screen 27: The Manual Maintenance Menu enables the user to either access, modify, add or delete selected entries in the Manual File. Select one of five options: 1 - add a new Manual Description entry; 2 - update Manual Description entries; 3 - delete a Manual Description entry; 4 - review Manual Description entries; or 5 - return to the Process Selection Menu (Screen 14).

2.3.3.5.1 Add a new Manual Description entry.

Manual description entries may only be added for the site selected. The **site number and feature number must be known** to successfully execute this process. This restriction applies even if a manual description already exists for a site and feature number. Be sure you want to add a new manual and not just update an existing one! Delete an old manual if it is no longer applicable.

Screen 28: Enter a valid site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site number selected.

Enter the feature number for the manual description to add. Valid feature numbers range from 000101 to 994001. The system validates the feature number to ensure that the feature number exists on the file. Once a valid feature number is entered, the CLIN and description data appear. The cursor moves to the Manual Description field where the new manual description is entered. Indicate whether the new description is acceptable. If the response is "N", either choose to continue or exit. If the response is "Y", the new

description entered is accepted. Choose either to continue or exit. On exiting, the system returns to the Manual Maintenance Menu (Screen 27).

2.3.3.5.2 Update a Manual Description entry.

Select menu option 2 (from the Manual Maintenance Menu - Screen 27) to modify a Manual File record. After the selection of option 2, the Manual Update Format screen (Screen 29) appears.

Screen 29: Enter a valid site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Select one of three options: 1 - update a specific site's records; or 2 - start at the beginning of the Manual File; or 3 - start at the end of the Manual File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to modify records for a specific site.

Following entry of the specified site number, two options exist: 1 - select a specific six digit feature number or 2 - start with the first feature number by entering a feature number of "00 " **(two zeroes followed by four spaces)**. Status messages appear at the bottom of the screen when reaching the first and last records. This action only occurs if a specific site is selected (a site selection other than "00" or "99").

The only field allowed to be modified during this process is the Manual Description field. An introductory window, explaining how to terminate the modification of a record field, appears following the entry of a feature number. Terminate the introductory information window by striking the RETURN or ENTER key.

Changes to fields are possible one field at a time. Accept or reject changes made to any field. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Manual Maintenance Menu (Screen 27).

2.3.3.5.3 Delete a Manual Description entry.

Select menu option 3 (from the Manual Maintenance Menu - Screen 27) to delete a Manual Description entry. After the selection of option 3, the Manual Deletion Format screen (Screen 30) appears.

Screen 30: Enter a valid site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Enter the feature number for the description to delete. Valid feature numbers range from 000101 to 994001. When the description appears, verify the deletion decision. If the response is "N", the Manual Description is left intact. If the response is "Y", the Manual Description is deleted. Choose either to continue or exit. On exiting, the system returns to the Manual Maintenance Menu (Screen 27).

2.3.3.5.4 Review a Manual Description entry.

Select menu option 4 (from the Manual Maintenance Menu - Screen 27) to review a Manual Description entry. After the selection of option 4, the Manual Review Format screen (Screen 31) appears.

Screen 31: Enter a site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Select one of three options: 1 - review a specific site's records; or 2 - start at the beginning of the Manual File; or 3 - start at the end of the Manual File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to review records for a specific site.

No data entries may be changed in this screen. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Site Name Maintenance Menu (Screen 24).

2.3.3.6 Perform Maintenance on the Serial Number File.

Select menu option 6 (from the Process Selection Menu - Screen 14) to either modify or review records in the Serial Number File. Following the selection of option 6, the Serial Number Maintenance Menu (Screen 32) appears.

Three data elements must be known to perform an update on a Serial Number File record. The three data elements are: 1 - site number, 2 - effective delivery order date and 3 - feature number of the serial number to be modified. If **all three or any** of these data elements are not known, run a date level report to obtain the three elements (refer to the section Generate REPORTS for the Project, a Site or Equipment for specific procedures).

2.3.3.6.1 Modify a Serial Number File record.

Select menu option 1 (from the Serial Number Maintenance Selection Menu - Screen 32) to modify a Serial Number File record. After the selection of option 1, the Serial Number Update Format screen (Screen 33) appears.

Screen 33: Enter a valid site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Following the site number entry, enter an effective delivery order date. Three attempts are allowed to specify an effective delivery order date. Screen 34 appears if on the third attempt a valid effective delivery order date is not entered. Select one of two choices: 1 - continue with the update process or 2 - exit the update process and obtain the three elements (refer to the section Generate REPORTS for the Project, a Site or Equipment for specific procedures).

Once a delivery order date is entered, enter a valid feature number. Valid feature numbers range from 000101 to 994001. Screen 34 appears if all three data elements do not match any record data fields for the site selected. The same two choices described in the paragraph above may be chosen. When a valid feature number is entered and all three data elements match, a short introductory window explaining how to terminate the modification of a record

field appears. Terminate the introductory information window by striking the RETURN or ENTER key.

Following termination of the introductory information screen, the Serial Number File record selected appears. The only field that may be modified is the serial number field. Accept or reject changes made to the serial number field. If the response is "Y", the change is made to the database. If the response is "N", the change is not accepted. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the update process. On exiting, the system returns to the Serial Number Maintenance Menu (Screen 32).

2.3.3.6.2 Review a Serial Number File record.

Select menu option 2 (from the Serial Number Maintenance Selection Menu - Screen 32) to review a Serial Number File record. After the selection of option 2, the Serial Number Update Format screen (Screen 35) appears.

Screen 35: Enter a valid site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Select one of three options: 1 - review a specific site's records; or 2 - start at the beginning of the Serial Number File; or 3 - start at the end of the Serial Number File viewing records until the desired record appears. Enter "00" to start viewing records at the beginning of the file. Enter "99" to start viewing records at the end of the file. Enter the site number to review records for a specific site.

Following entry of the specified site number, two options exist: 1 - select a specific six digit feature number or 2 - start with the first feature number by entering "00 " **(two zeroes followed by four spaces).** Valid feature numbers range from 000101 to 994001. Status messages appear at the bottom of the screen when reaching the first and last records. This action only occurs if a specific site is selected (a site selection other than "00" or "99").

No data fields are allowed to be modified during the review process. Choose either: 1 - access the next record; 2 - access the previous record; or 3 - exit the review

process. On exiting, the system returns to the Serial Number Maintenance Menu (Screen 32).

2.3.3.7 Generate REPORTS for the Project, a Specific Site or a Particular Date.

Select menu option 7 (from the Process Selection Menu - Screen 14) to obtain an overall project report, a report for a particular site or a report for a delivery order issued on a particular site. Following the selection of option 7, the Report by Type Menu (Screen 36) appears.

Screen 36: Various levels of reports which may be selected appear. Select one of three options: 1 - obtain a project level report; 2 - obtain a site specific report; 3 - obtain a delivery order specific report; or 4 - return to the Process Selection Menu (Screen 14).

Screen 37: When obtaining any of the various types of reports, two options exist: 1 - obtain a printed report or 2 - view the data on screen. Screen 37 always appears if a printed report is selected. Ensure: 1 - the power to the printer is on; 2 - sufficient paper is loaded in the printer and 3 - the leading edge of the paper is positioned with the printer's typing line alignment mark. After all three conditions are satisfied, commence printing by the striking the RETURN or ENTER key. Once printing commences, the appropriate screen appears and status messages detailing the progress of the report are displayed.

2.3.3.7.1 Obtain an Overall Project Level Report.

Select menu option 7 (from the Process Selection Menu - Screen 14) to obtain an overall project level report for a site. The Report by Type Menu (Screen 36) appears. From the Report by Type Menu, select option 1. After the selection of option 1, the Project Level Reports Menu (Screen 38) appears.

Screen 38: Select one of three options: 1 - obtain a report by equipment type; 2 - obtain a report by serial numbers; or 3 - return to the Report by Type Menu (Screen 36).

2.3.3.7.1.1 Obtain an Overall Project Report by Equipment Type.

Select menu option 1 (from the Project Level Reports Menu - Screen 38) to obtain an overall project report broken down by type of equipment. After the selection of option 1, the Equipment Project Level Report screen (Screen 39) appears.

Screen 39: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 40 is a sample report format.

Screen 40: All equipment is totaled by feature number and presented. The quantity for each feature number displayed represents the total quantity ordered for all sites in the Equipment database. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Project Level Reports Menu (Screen 38).

2.3.3.7.1.2 Obtain an Overall Project Report by Serial Number.

Select menu option 2 (from the Project Level Reports Menu - Screen 38) to obtain an overall project report broken down by serial number. After the selection of option 2, the Equipment Serial Number Project Level Report screen (Screen 41) appears.

Screen 41: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 42 is a sample report format.

Screen 42: All serial numbers for each component at all sites are presented. This will probably be a LARGE report! Entries include: Site Number, CLIN, Feature Number, Description, Effective Delivery Order Date, total component quantity on the delivery order, specific component number (e.g. 1 of 9), and the applicable serial number. After each

screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Project Level Reports Menu (Screen 38).

2.3.3.7.2 Obtain a Report for a Particular Site.

Select menu option 7 (from the Process Selection Menu - Screen 14) to obtain a report for a particular site The Report by Type Menu (Screen 36) appears. Select menu option 2 from the Report by Type Menu. After the selection of option 2, the Site Level Reports Menu (Screen 43) appears.

Screen 43: Select one of four options: 1 - obtain a report by equipment type; 2 - obtain a report of site manuals; 3 - obtain a report by serial number; or 4 - return to the Site Level Reports Menu (Screen 43).

2.3.3.7.2.1 Obtain a Site Specific Report by Equipment Type.

Select menu option 1 (from the Site Level Reports Menu - Screen 43) to obtain a site specific report broken down by equipment type. After the selection of option 1, the Equipment Site Level Report screen (Screen 44) appears.

Screen 44: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 45: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 46 is a sample report format.

Screen 46: All records for a specific site are selected from the Equipment database and their quantities are totaled. The Site Number, CLIN, Feature Number, Equipment Description, and total site quantity are presented. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Site Level Reports Menu (Screen 42).

2.3.3.7.2.2 Obtain a Site Specific Report of Manuals.

Select menu option 2 (from the Site Level Reports Menu - Screen 43) to obtain a site specific manual report. After the selection of option 2, the Site Level Manual Report screen (Screen 47) appears.

Screen 47: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 48: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 49 is a sample report format.

Screen 49: The Manual File is accessed and each feature number within the selected site appears. Report items include Site Number, CLIN, Feature Number, Description, and Manual Description. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Site Level Reports Menu (Screen 42).

2.3.3.7.2.3 Obtain a Site Specific Report by Serial Number.

Select menu option 3 (from the Site Level Reports Menu - Screen 43) to obtain a site specific report of serial numbers. After the selection of option 3, the Site Serial Number Report screen (Screen 50) appears.

Screen 50: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 51: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 52 is a sample report format.

Screen 52: All serial numbers for each component at a site appear. Entries include: Site Number, CLIN, Feature Number, Description, Effective Delivery Order Date, total component quantity on the delivery order, specific component number (e.g. 1 of 9), and the applicable serial number. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Site Level Reports Menu (Screen 42).

2.3.3.7.3 Obtain a Report for a Delivery Order Issued on a Particular Date.

Select menu option 7 (from the Process Selection Menu - Screen 14) to obtain a report for a delivery order issued on a particular date. The Report by Type Menu (Screen 36) appears. From the Report by Type Menu, select option 3. After the selection of option 3, the Delivery Order Date Level Reports Menu (Screen 53) appears.

Screen 53: Select one of four options: 1 - obtain an equipment report with unit costs; 2 - obtain an equipment report without costs; 3 - obtain a report by serial number; or 4 - return to the Delivery Order Date Level Reports Menu (Screen 53).

2.3.3.7.3.1 Obtain a Report by Equipment Type with Unit Prices.

Select menu option 1 (from the Delivery Order Date Level Reports Menu - Screen 53) to obtain a date level report broken down by equipment type with unit prices. After the selection of option 1, the Delivery Order Level Report screen (Screen 54) appears.

Screen 54: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 55: All delivery orders existing in the Equipment database appear. After the last delivery order effective date appears, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

Screen 56: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response

is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 57 is a sample report format.

Screen 57: Items appearing on the report are Delivery Order Date, Site Number, CLIN, Feature Number, Description, Delivery Order Quantity, and Component Unit Purchase Price. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

2.3.3.7.3.2 Obtain a Report by Equipment Type without Unit Prices.

Select menu option 2 (from the Delivery Order Date Level Reports Menu - Screen 53) to obtain a date level report broken down by equipment type without unit prices. After the selection of option 2, the Delivery Order Level Report screen (Screen 58) appears.

Screen 58: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 59: All delivery orders existing in the Equipment database appear. After the last delivery order effective date appears, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

Screen 60: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 61 is a sample report format.

Screen 61: Items appearing on the report are Delivery Order Date, Site Number, CLIN, Feature Number, Description, Delivery Order Quantity, and FDC Model Number. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

2.3.3.7.3.3 Obtain a Date Level Report by Serial Number.

Select menu option 3 (from the Delivery Order Date Level Reports Menu - (Screen 53) to obtain a date level report broken down by serial number. After the selection of option 3, the Site Serial Number Report screen (Screen 62) appears.

Screen 62: Enter the site number, an integer from 01 to 58. The site number entered is validated to ensure that records exist for the site selected.

Screen 63: All delivery orders existing in the Equipment database appear. After the last delivery order effective date appears, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

Screen 64: Indicate whether a printed report is desired. Responses are either "Y" or "N". If the response is "Y", Screen 37 appears before printing commences (See the discussion of Screen 37 above). If the response is "N", the data and associated headings appear. Screen 65 is a sample report format.

Screen 65: Items appearing on the report are Delivery Order Date, Site Number, CLIN, Feature Number, Description, Delivery Order Effective Date, Total Quantity by Component ordered on the delivery order, specific component quantity (e.g. 1 of 9), and Item Serial Number. After each screen, choose either: 1 - continue the report or 2 - exit the report process. On exiting, the system returns to the Delivery Order Date Level Reports Menu (Screen 53).

2.3.3.8 Generate a Maintenance Delivery Order for a SPLICE Site.

Select menu option 8 (from the Process Selection Menu - Screen 14) to generate a maintenance delivery order for a SPLICE site. Following the selection of option 8, the Maintenance Delivery Order Generation Program screen (Screen 66) appears.

Screen 66: Enter the following data: 1 - Site Number; 2 - LCN Hardware Maintenance Escalation Rate; 3 - LCN

Software Escalation Maintenance Rate; 4 - SPLICENet Maintenance Discount Rate; and 5 - Site Maintenance Escalation Rate. After these data elements are entered, choose either: 1 - continue or 2 - exit the process. If the response is "Y", the maintenance delivery order generation process is initiated and takes approximately 10 minutes to complete. **The output file generated is always "NEWDO.PRN".** On completion of the generation process, the system returns to the Process Selection Menu (Screen 14) to await the next selection.

On returning to the Process Selection Menu, select menu option 0 to return to the Function Selection Menu (Screen 1). From the Function Selection Menu, select menu option 2. After selecting option 2, the system transfers to the LOTUS 1-2-3 environment. Refer to section 2.3.2 on page 19 to obtain the specific details for step-by-step procedures. Since this is a maintenance delivery order rather than an initial delivery order, follow the procedures which address MAINTDO worksheet execution versus SKELETON worksheet execution.

2.3.3.9 Generate Mailing Labels for all SPLICE Sites.

Select menu option 9 (from the Process Selection Menu - Screen 14) to generate mailing labels for all SPLICE sites. Following the selection of option 9, the Mailing Label Generation Program screen (Screen 67) appears.

Screen 67: The mailing label generation program simply produces mailing labels for all the SPLICE sites. Delivery order changes, contract amendments, or other SPLICE related correspondence may be mailed to all SPLICE sites without having to manually create labels. The only input required for the process is the number of copies of mailing labels desired during the run. Valid input values are from 1 to 10 copies of mailing labels. When processing is complete, control returns to the Process Selection Menu (Screen 14) to await the next selection.

This completes the discussion of the process functions of the SPLICE Configurer and dBASE III Configuration Management System. Exit the integrated system by either of two options: 1 - select Function Selection Menu option 5 to return to the dBASE III system prompt or 2 - select Function Selection Menu option 6 to return to the DOS operating system prompt.

2.3.4 FUNCTION 4: View the on-line User's Manual

Select Function Selection Menu option 4 to view the on-line User's Manual. The system temporarily transfers control to Wordstar where a copy of the file "USERS.MAN" is viewed. Any changes made to this file during the viewing process are not retained. The file copy is destroyed on termination from Wordstar. Terminate User's Manual viewing by typing either "^KD" or "^KQ" (see note below). Either command returns the system to the Wordstar opening menu. Typing the letter "X" returns the system to the Configuration Management System.

NOTE: The commands "^KD" and "^KQ" are executed by simultaneously holding down the "CTRL" key (represented by the character ^) on the left side of the keyboard and typing the letter "K" followed by either letters "D" or "Q".

3.0 System Output.

The output from the SPLICE Pascal configurer is a formatted disk file. The file is input data for LOTUS 1-2-3, which has 3 outputs: 1 - an archival LOTUS ".WKS" disk file; 2 - a dBASE ".PRN" input disk file; and 3 - a delivery order.

The dBASE process has numerous outputs. Refer to Section 2 (Screens 36 through 66) for further information.

4.0 Exception Reports.

This integrated system is interactive, therefore, no hard copy exception reports are produced. Erroneously entered data is presented to the user for immediate action or correction.

5.0 Limitations.

The SPLICE System Configurer was designed on an IBM-PC, but is intended to be run on an IBM-PC AT. The designers recommend that the target IBM-PC AT have the maximum user memory allowed (640KB). To run the dBASE Configuration Management System, **a hard disk is mandatory.** The system requires a 132 column printer to print delivery orders

generated from both LOTUS 1-2-3 and dBASE processes and mailing labels.

If a system other than an IBM-PC/AT is used, the system will respond slowly. Further performance degradation will occur while importing the ".PRN" file into LOTUS. Performance degradation will also occur during the Serial Number building process in the file load and in the maintenance delivery order generation process.

256KB of memory is required if dBASE III version 1.0 is used. 384KB RAM is required if dBASE version 1.1 is used.

The SPLICE Pascal Configurer system is limited by the number of components it can configure (200) and the number of sites it can configure (58).

The LOTUS 1-2-3 and dBASE III modules exhibit only those limitations which exist for those "off-the-shelf" packages.

6.0 Command Sequence.

Issue the command SPLICE (ex: C>SPLICE) from the DOS command prompt to invoke the SPLICE integrated configuration system (Pascal Configurer and dBASE Configuration Management System). This directs DOS to process a command batch file named SPLICE. The command batch file issues all required commands and causes the integrated system to load the memory resident module FLASHUP and commence integrated system execution (See Section 2 for more detailed entries).

NOTE: Prior to issuing the command SPLICE, deactivate any resident color enhancement programs (ex: **KOLOR.COM**). Such programs interfere with the screen colors generated by the system and data entry color attributes.

7.0 Who to Call.

If program malfunctions occur or questions related to the system arise, contact LCDR E. J. Case, SC, USN, phone number (408) 384-8204 or LCDR R. L. Beard III, SC, USN, phone number (408) 646-1982.

SELECTION CRITERIA FOR A SPLICE CONFIGURATION

SITE NAME: _____

SITE NUMBER: _____

DISCOUNT/ESCALATION RATES:

FDC SNA Interface discount rate: _____

NON-LCN PURCHASE discount rate: _____

LCN PURCHASE discount rate: _____

SPLICENet Software Maintenance discount rate: _____

SPLICENet Software Purchase discount rate: _____

EMERGENCY MAINTENANCE escalation rate: _____

LCN HARDWARE MAINTENANCE escalation rate: _____

LCN SOFTWARE MAINTENANCE escalation rate: _____

INSTALLATION escalation rate: _____

TRAINING escalation rate: _____

DOCUMENTATION escalation rate: _____

MAINTENANCE escalation rate from SPLICE contract: _____

Output File Name: _____.PRN

Number of MAINTENANCE MONTHS for this order: _____

Effective Delivery Order Date: ___/___/___
(MM / DD / YY)

HARDWARE SELECTIONS:

PROCESSORS recommended by FMSO Sizing Study: _____

CENTRONICS PRINTERS to be ordered: _____

TANDEM CRTS to be ordered: _____

128MB DISCs FMSO Sizing Study recommended, **EVEN** No.: _____

240MB DISCs FMSO Sizing Study recommended, **EVEN** No.: _____

540MB DISCs FMSO Sizing Study recommended, **EVEN** No.: _____

Non-6100 ASYNC Controllers to be installed: _____

Non-6100 ASYNC EXTENSION BOARDS to be installed per controller (0/1/2): _____

BIT SYNC LINES to be supported: _____

BYTE SYNC LINES to be supported: _____

TRI-DENSITY TAPE DRIVES to be installed: _____
(Ensure fixed disk archival back-up drives are included)

READER/PUNCHES to be installed: _____

CARD READERS to be installed: _____

1000 LPM PRINTERS to be installed: _____

600 LPM PRINTERS to be installed: _____

LCN TRUNKS required for the network: _____

6100 LINE INTERFACE UNITS: _____

PERKIN-ELMER Local Computer Network interfaces: _____

Burroughs B4800 Local Computer Network interfaces: _____

Burroughs B4900 Local Computer Network interfaces: _____

IBM System Local Computer Network interfaces: _____

UNIVAC System Local Computer Network interfaces: _____

FIPS Standard Local Computer Network interfaces: _____

TANDEM HYPERchannels to be installed: _____

PATCH PANEL CABINETS: _____
(additional for reserve and expansion)

SYSTEM CABINETS: _____
(additional for reserve and expansion)

EXPANSION CABINET(S): _____
(additional for reserve and expansion)

HYPERchannel Adapter Cabinet(s) required: _____

Estimate the distance between the two most distant Computers on the Local Computer Network, Range - (1 to 5000 feet): _____

SOFTWARE SELECTIONS:

File Security System Software (Yes/No)? _____

LCN File Utility Package Software (Yes/No)? _____

ATP 6100 Software (Yes/No)? _____

BSC 6100 Software (Yes/No)? _____

ADCCP 6100 Software (Yes/No)? _____

BURROUGHS POLL/SELECT 6100 Software (Yes/No)? _____

SNAX and SNAX/HLS 6100 Software (Yes/No)? _____

TINET 6100 Software (Yes/No)? _____

TR 3271 Software (Yes/No)? _____

AM 6520 Software (Yes/No)? _____

T-TEXT Software (Yes/No)? _____

FDC SNA Interface Software (Yes/No)? _____

FDC DLANet Interface Software (Yes/No)? _____

DDN Interface Software (Yes/No)? _____

NETWORK MAINTENANCE FACILITY (NMF):

NMF Group Package Software (Yes/No)? _____

NMF Base Facility Software (Yes/No)? _____

NMF Performance Monitoring Software (Yes/No)? _____

NMF Diagnostic Monitoring Software (Yes/No)? _____

NMF Accounting Application Software (Yes/No)? _____

NETEX MAINTENANCE MONTHS for this order: _____

SPLICENet MAINTENANCE MONTHS for this order: _____

DOCUMENTATION SELECTIONS:

COMPUTER OPERATIONS MANUAL sets required: _____

SYSTEMS PROGRAMMER MANUAL sets required: _____

HARDWARE MANUAL sets required: _____

PROGRAMMER REFERENCE MANUAL sets required: _____

TRAINING SELECTIONS:

Select Training Group to be ordered
(Group I-IV / None): _____

OPERATOR TRAINING COURSES required: _____

HARDWARE OVERVIEW COURSES required: _____

SYSTEMS RESOURCE MANAGEMENT COURSES required: _____

SYSTEMS TUNING AND XRAY COURSES required: _____

DATA COMMUNICATIONS COURSES required: _____

TAL COURSES required: _____

SPLICENet Migration Workshop COURSES required: _____

MAINTENANCE AND SITE PREP SELECTIONS:

EMERGENCY PER-CALL MAINTENANCE months required: _____

Should we include SITE PREPS in this run? (Yes/No): _____

FUNCTION SELECTION MENU

Stock Point Logistics Integrated Communications Environment

SPLICE

1 - Configure a site using the SPLICE Configurer

2 - Perform financial analysis of a site using LOTUS 1-2-3

3 - Interact with the Configuration Management System

4 - Review the USER's MANUAL

5 - Return to the dBASE prompt

6 - Return to the DOS Operating System prompt

Please enter your choice: ■

SCREEN 1

NAVAL SUPPLY SYSTEMS COMMAND

STOCK POINT LOGISTICS INTEGRATED COMMUNICATIONS ENVIRONMENT

S P L I C E

SYSTEM COMFIGURER

Version 1.2
December 1985

SCREEN 2

LISTING OF SPLICE SITES

01 ASO PHILADELPHIA	02 FMSO MECHANICSBURG	03 FMSO MECHANICSBURG
04 MCAS CHERRY POINT	05 MCAS EL TORO	06 MCAF QUANTICO
07 MCAS YUMA	08 NAC INDIANAPOLIS	09 NARDAC JACKSONVILLE
10 NARDAC NEW ORLEANS	11 NARDAC NORFOLK	12 NARDAC PENSACOLA
13 NARDAC SAN DIEGO	14 NARDAC SAN FRANSISCO	15 NARDAC WASHINGTON
16 NAS BARBERS POINT	17 NAS BRUNSWICK	18 NAS CECIL FIELD
19 NAS KEY WEST	20 NAEC LAKE HURST	21 NAS MEMPHIS
22 NAS MIRAMAR	23 NAS OCEANA (INACTIVE)	24 NAS PENSACOLA
25 NAS WHIDBEY ISLAND	26 NATC PATUXENT RIVER	27 PMTC POINT MUGU
28 NAVDAF CORPUS CHRISTI	29 NAVDAF GREAT LAKES	30 NAVDAF LEMOORE
31 NAVDAF MOFFETT FIELD	32 NAVDAF ORLANDO	33 NRCC LONG BEACH
34 NRCC NEWPORT	35 NRCC PHILADELPHIA	36 NRCC WASHINGTON
37 NUWES KEYPORT	38 NAVSTA MAYPORT	39 NSC CHARLESTON
40 NSC NORFOLK	41 NSC OAKLAND	42 NSC PEARL HARBOR
43 NSC PUGET SOUND	44 NSC SAN DIEGO	45 NSD GUAM
46 NSD SUBIC BAY	47 NSD YOKOSUKA	48 NSY PHILADELPHIA
49 NSY PORTSMOUTH	50 NTC SAN DIEGO	51 SPCC MECHANICSBURG
52 SUBASE KINGS BAY	53 SUBASE NEW LONDON	54 SUBASE PEARL HARBOR
55 SWFPAC BREMERTON	56 TRF BANGOR	57 SWFLANT KINGS BAY
58 TRF KINGS BAY	59 TO BE DETERMINED	60 TO BE DETERMINED
61 TO BE DETERMINED	62 TO BE DETERMINED	

Please select the site you desire to configure: ■■

SCREEN 3

OUTPUT MEDIA and DISCOUNT/ESCALATION RATES

DISCOUNT & ESCALATION RATES

Values input are added to one (1) to generate the correct discount or escalation rate

FDC SNA Interface Discount Rate:	■.■■
Non-LCN Purchase Discount Rate:	■.■■
LCN Purchase Discount Rate:	■.■■
SPLICENet Software Maintenance Discount Rate:	■.■■
SPLICENet Software Purchase Discount Rate:	■.■■
Emergency Maintenance Escalation Rate:	■.■
LCN Hardware Maintenance Escalation Rate:	■.■■■
LCN Software Maintenance Escalation Rate:	■.■■■
Installation Escalation Rate:	■.■■■
Training Escalation Rate:	■.■■
Documentation Escalation Rate:	■■.■■
Maintenance Escalation Rate:	■.■■■

OUTPUT "PRN" FILE NAME

SPLICE ouput and LOTUS 1-2-3 input filename: ■■■■■■■■.PRN

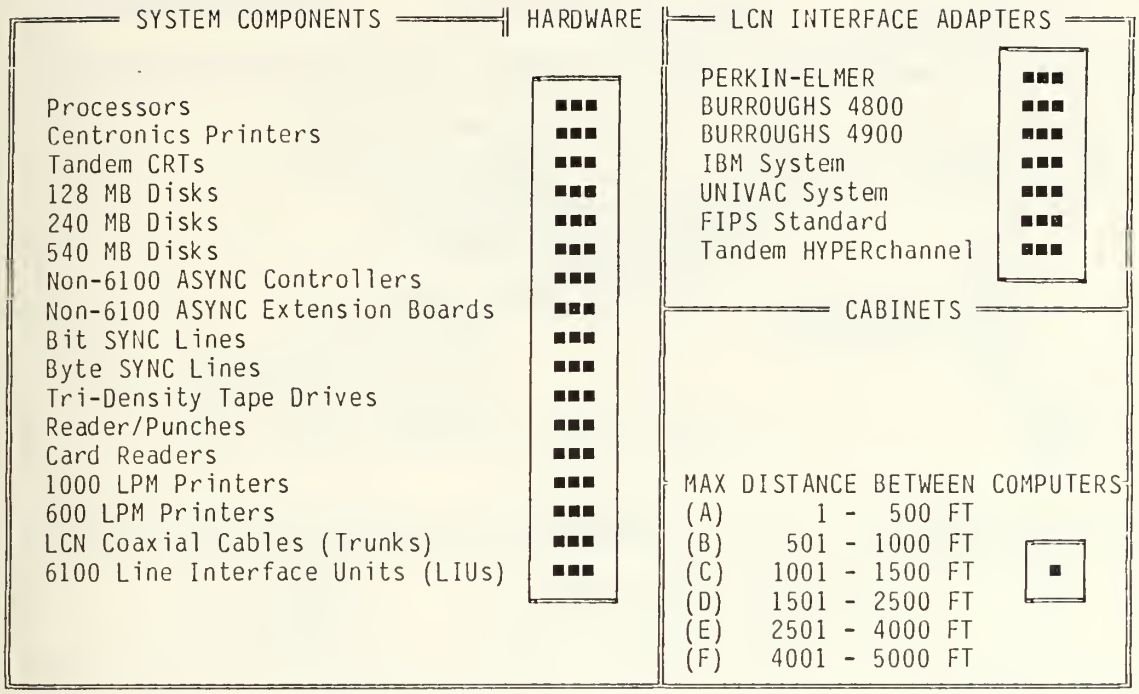
MAINTENANCE MONTHS

Hardware Maintenance Months: ■■

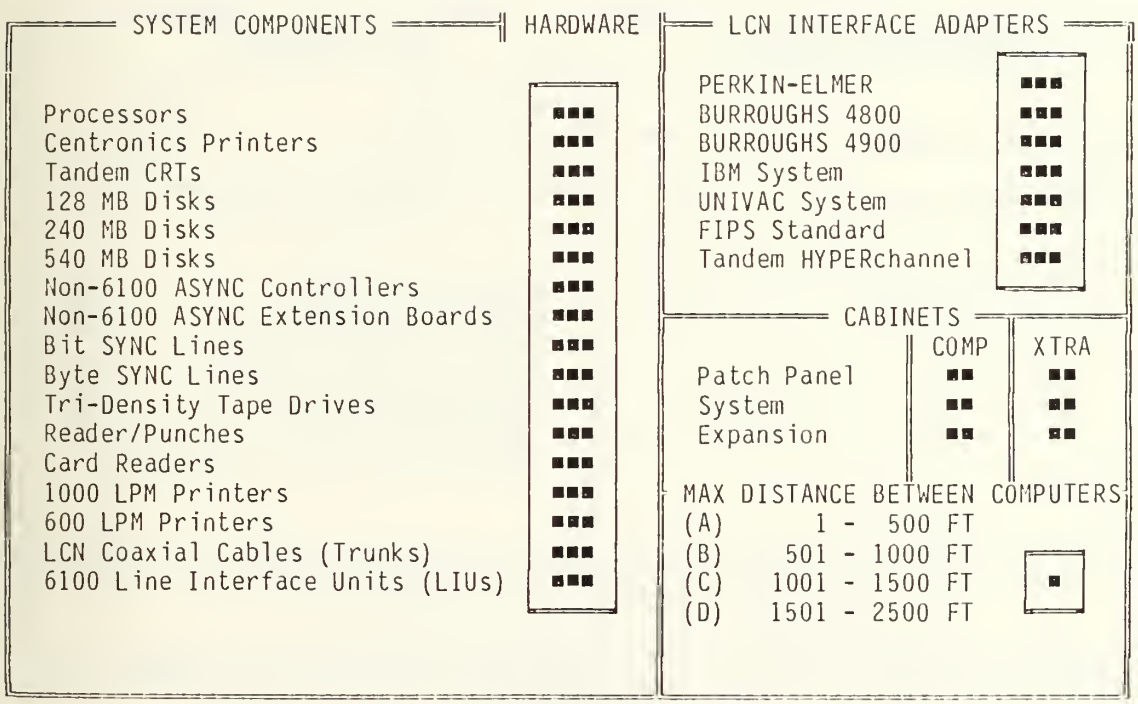
Delivery Order Effective Date

Effective Date ■■/■■/■■

SCREEN 4



SCREEN 5



SCREEN 6

SOFTWARE RELATED INPUTS

«««««««««««««««««««««««««« SOFTWARE PACKAGES »»»»»»»»»»»»»»»»»»»»»»»»»»

File Security	■	FDC SNA Interface	■
LCN File Utility Package	■	FDC DLANET Interface	■
6100 Packages		DDN Interface	■
ATP	■		
BSC	■	NMF Group	■
ADCCP	■		
Burroughs Poll Select	■	NMF Packages	
SNAX and SNAX/HLS	■	Base Facility	■
TINET	■	Performance Monitoring	■
TR 3271	■	Diagnostic Monitoring	■
AM 6520	■	Accounting Application	■
T-Text	■		

«««««««««««««««««««««««« MONTHS of SOFTWARE MAINTENANCE »»»»»»»»»»»»»»»»»»»»»»»

NETEX Maintenance Months ■■
SPLICENet Maintenance Months ■■

SCREEN 7

DOCUMENTATION, TRAINING & MAINTENANCE INPUTS

DOCUMENTATION MANUALS

Computer Operations	■■
Programmer Reference	■■
Hardware	■■
Systems Programmer	■■

TRAINING GROUPS

(1) Group I (5) None
(2) Group II
(3) Group III ■
(4) Group IV

TRAINING COURSES

Operator Training	■■
Hardware Overview	■■
Systems Resource Management	■■
Systems Tuning and XRAY	■■
Data Communications	■■
TANDEM Application Language	■■
SPLICENet Migration Workshop	■■

EMERGENCY MAINTENANCE & SITE PREPARATIONS

Months of EMERGENCY PER-CALL ■■ Include Charges? (Yes or No) ■

SCREEN 8

1 - 2 - 3

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Release 1A
*

(Press Any Key To Continue)

SCREEN 9

A1: READY

	A	B	C	D	E	F	G
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

SCREEN 10

```
A1:                                                          MENU
Enter name of file to retrieve:
SKELETON  MAINTORD
        A        B        C        D        E        F        G
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

SCREEN 11

```
A1:                                                          READY

        A           B                   C              D       E
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
```

SCREEN 12

A1: ' READY

	A	B	C	D	E
1					
2					
3					
4	Site:	44	NSC SAN DIEGO, CA		
5					
6					
7	Hardware				
8					
9					
10					
11	Contract	Feature			
12	Line No.	Numbers	Description	Qty	Unit Price
13					
14	440101	010201	NS-TXP, 2 MEG	8	86760.00
15	440102	010301	2 MEG MEMORY	8	19800.00
16	440104	013001	OSP WITH 6530	1	13387.50
17	440105	013101	CENTRONIX PRINTER	2	1615.50
18	440106	013201	6530 CRT	17	2317.50
19	440107	013202	PRINTER INTERFACE	1	409.50
20	440108	015001	PATCH PANEL CABINET	2	2250.00

SCREEN 13

PROCESS SELECTION MENU

Stock Point Logistics Integrated Communications Environment

SPLICE

1 - Load a new DELIVERY ORDER into the database
2 - Perform maintenance on the EQUIPMENT File
3 - Perform maintenance on the EQUIPMENT DESCRIPTION File
4 - Perform maintenance on the SITE NAME File
5 - Perform maintenance on the MANUAL File
6 - Perform maintenance on the SERIAL NUMBER File
7 - Generate REPORTS for the Project, a Site or Equipment
8 - Generate a MAINTENANCE DELIVERY ORDER for a SPLICE Site
9 - Generate MAILING LABELS for all SPLICE Sites

0 - RETURN to the Function Selection Menu

Please enter your choice: ■

SCREEN 14

```
DELIVERY ORDER LOAD MENU

[1]   Load a new delivery order

[2]   Return to the Main Menu
```

SCREEN 15

```
DELIVERY ORDER LOADING SELECTION MENU

LOTUS 1-2-3 output file name to load:      ■■■■■■■■.PRN

Effective Date of the Delivery Order:      ■■■■■■
                                           YYMMDD

Site Number on the Delivery Order:         ■■

Enter the Site Number to be loaded:        ■■



Do you want to enter another Delivery Order? (Yes or No):  ■
```

SCREEN 16

```
EQUIPMENT MAINTENANCE SELECTION MENU

  [1]   Modify DataBase Entries

  [2]   Review Existing Records

  [3]   Return to the Main Menu
```

SCREEN 17

```
                    EQUIPMENT UPDATE FORMAT

                    Current Record #: ■■■■■

Site Number:   ■■        Effective Date of Delivery Order:    ■■■■■■
                                                              YYMMDD

     Feature Number:                  ■■■■■■
     CLIN Nomenclature/Description:   ■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■
     Quantity Ordered:                ■■■

          Basic Unit Cost:                ■■■■■■■■.■■
          Monthly Maintenance Cost:       ■■■■■■■■.■■
          Unit Installation Cost:            ■■■■■.■■


     Enter N - next record, P - previous record or X - exit:  ■
```

SCREEN 18

```
                    EQUIPMENT REVIEW FORMAT

                    Current Record #: ■■■■■

Site Number: ■■        Effective Date of Delivery Order: ■■■■■■
                                                         YYMMDD

     Contract Line Item Number (CLIN): ■■■■
     Feature Number:                   ■■■■■■
     CLIN Nomenclature/Description:    ■■■■■■■■■■■■■■■■■■■■■■■■■
     Quantity Ordered:                 ■■■

               Basic Unit Cost:              ■■■■■■■■.■■
               Monthly Maintenance Cost:     ■■■■■■■■.■■
               Unit Installation Cost:          ■■■■■.■■

     Enter N - next record, P - previous record or X - exit: ■
```

SCREEN 19

```
EQUIPMENT DESCRIPTION MAINTENANCE MENU

   [1]   Modify DataBase Entries

   [2]   Review Existing Records

   [3]   Return to the Main Menu
```

SCREEN 20

DESCRIPTION UPDATE FORMAT

Current Record #: ■■■■■

Feature Number: ■■■■■■

Contract Line Item Number (CLIN): ■■■■

CLIN Nomenclature / Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

TANDEM Model Number: ■■■■■■■■■■

FDC Model Number: ■■■■■■■■■■■■■■■

Type of Component: ■

Base Maintenance Price: ■■■■.■■

Notes:

Enter N - next record, P - previous record or X - exit:

SCREEN 21

EQUIPMENT DESCRIPTION EDITING/TERMINATION INFORMATION

1. To edit the NOTES field, ensure the cursor is on the word "memo" and press the <CTRL> and "PgDn" keys together.

2. To EXIT the internal editor and SAVE the changes made to the NOTES field, press the <CTRL> and "W" keys together.

3. To EXIT the internal editor WITHOUT SAVING the changes made to the NOTES field, press the <ESC> key. This will return you to the full screen mode for the record being changed.

4. To SAVE the changes made by the internal editor and return to the configuration program, press the <CTRL> and "W" keys together.

5. To return to the configuration program WITHOUT SAVING the changes made by the internal editor, press the <ESC> key.

Press ENTER to continue

SCREEN 22

```
                    DESCRIPTION REVIEW FORMAT

                    Current Record #: ■■■■■

Feature Number:                       ■■■■■■

Contract Line Item Number (CLIN):     ■■■■

CLIN Nomenclature / Description:      ■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■■

TANDEM Model Number:                  ■■■■■■■■■■

FDC Model Number:                     ■■■■■■■■■■■■■■■

Type of Component:                    ■

Base Maintenance Price:               ■■■■.■■

Notes:

Enter N - next record, P - previous record or X - exit:
```

SCREEN 23

```
        SITE NAME MAINTENANCE MENU

[1]   Modify DataBase Entries

[2]   Review Existing Records

[3]   Return to the Main Selection Menu
```

SCREEN 24

```
                    SITE ADDRESS DATA UPDATE FORMAT

                        Current Record #:  ■■■■■

Number                  ■■
Abbreviated Name        ■■■■■
```

```
MANUAL MAINTENANCE MENU

[1]  Add a new manual description
[2]  Update existing description(s)
[3]  Delete existing description(s)
[4]  Review existing description(s)
[5]  Return to the Main Menu
```

SCREEN 27

```
MANUAL ADDITION FORMAT

Current Record #: ■■■■■

Site Number:  ■■

Feature Number:                    ■■■■■■
Contract Line Item Number (CLIN):  ■■■■
CLIN Nomenclature/Description:     ■■■■■■■■■■■■■■■■■■■■■■■■■■■

Manual Description:                ■■■■■■■■■■■■■■■■■■■■■■■■■■■

Enter N - next record, P - previous record or X - exit:  ■
```

SCREEN 28

MANUAL UPDATE FORMAT

Current Record #: ■■■■■

Site Number: ■■

Feature Number: ■■■■■■
Contract Line Item Number (CLIN): ■■■■
CLIN Nomenclature/Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■

Manual Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■

Enter N - next record, P - previous record or X - exit: ■

SCREEN 29

MANUAL DELETION FORMAT

Current Record #: ■■■■■

Site Number: ■■

Feature Number: ■■■■■■
Contract Line Item Number (CLIN): ■■■■
CLIN Nomenclature/Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■

Manual Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■

Enter N - next record, P - previous record or X - exit: ■

SCREEN 30

```
                    MANUAL REVIEW FORMAT

                    Current Record #: ■■■■■

                      Site Number:    ■■

Feature Number:                       ■■■■■■
Contract Line Item Number (CLIN):     ■■■■
CLIN Nomenclature/Description:        ■■■■■■■■■■■■■■■■■■■■■■■■■■

Manual Description:                   ■■■■■■■■■■■■■■■■■■■■■■■■■■

Enter N - next record, P - previous record or X - exit: ■
```

SCREEN 31

```
        SERIAL NUMBER MAINTENANCE MENU

    [1]   CHANGE an existing Serial Number

    [2]   REVIEW existing Serial Numbers

    [3]   Return to the Main Menu
```

SCREEN 32

SERIAL NUMBER UPDATE FORMAT

Current Record #: ■■■■■

Site Number: ■■ Effective Date of Delivery Order: ■■■■■■
YYMMDD

Contract Line Item Number (CLIN): ■■■■
Feature Number: ■■■■■■
CLIN Nomenclature/Description: ■■■■■■■■■■■■■■■■■■■■■■■■■■■■
Quantity Ordered: ■■■

Serial Number sub-record ■■■ of ■■■

Serial Number: ■■■■■■■■

Enter N - next record, P - previous record or X - exit: ■

SCREEN 33

In order for the user to be able to perform a SERIAL NUMBER update, three (3) data elements must be known:

1: The SITE NUMBER
2: The EFFECTIVE DATE of the delivery order
3: The FEATURE NUMBER of the serial number to be modified

If all tree of these elements are not known, the user should terminate the update process and request a DATE LEVEL REPORT for the site number in question (Option "7" on the PROCESS SELECTION MENU followed by option "3" on the REPORT BY TYPE MENU). Any one of the three options will enable the user to view all three of the data elements needed for the Serial Number Update process. Once all three data elements have been obtained, the user can then select the Serial Number Update option.

Please select the option desired below:

[1] Continue with the Serial Number Update process.

[2] Exit the Serial Number Update process to obtain a DATE LEVEL Report and the three required data elements.

SCREEN 34

```
                    SERIAL NUMBER REVIEW FORMAT

                    Current Record #: ■■■■■

Site Number: ■■        Effective Date of Delivery Order: ■■■■■■
                                                         YYMMDD

     Contract Line Item Number (CLIN): ■■■■
     Feature Number:                   ■■■■■■
     CLIN Nomenclature/Description:    ■■■■■■■■■■■■■■■■■■■■■■■■■
     Quantity Ordered:                 ■■■

          Serial Number sub-record ■■■ of ■■■

     Serial Number:                    ■■■■■■■■

     Enter N - next record, P - previous record or X - exit: ■
```

SCREEN 35

```
              REPORT BY TYPE MENU

     [1]   Overall PROJECT Report

     [2]   Report for a particular SITE

     [3]   Report for a DELIVERY ORDER issued
             on a particular date

     [4]   Return to the Report Level Menu
```

SCREEN 36

```
ATTENTION!

1.  Turn on your printer.

2.  Insert paper.

3.  Position to top edge.

  Press ENTER to continue
```

SCREEN 37

```
PROJECT LEVEL REPORTS

[1]   Report by EQUIPMENT Type

[2]   Report by SERIAL NUMBER

[3]   Return to the Reports Level Menu
```

SCREEN 38

```
                    EQUIPMENT PROJECT LEVEL REPORT

-------------------------------------------------------------------------------

                  Do you want a printed report?  (Yes or No):  N

                        Enter C to continue or X to exit:
```

SCREEN 39

```
                    EQUIPMENT PROJECT LEVEL REPORT

  CLIN       FEATURE#          DESCRIPTION                    QTY
-------------------------------------------------------------------------------
  0001       000101       SITE POWER PREPARATIONS             2
  0101       010201       NS-TXP, 2 MEG                      22
  0102       010301       2 MEG MEMORY                       22
  0104       013001       OSP WITH 6530                       2
  0105       013101       CENTRONIX PRINTER                   5
  0106       013201       6530 CRT                           50
  0107       013202       PRINTER INTERFACE                   2
  0108       015001       PATCH PANEL CABINET                 6
  0109       015101       SYSTEMS CABINET                     8
  0110       015201       I/O POWER MODULE                   24
  0109       015301       EXPANSION CABINET                   2
  0112       016001       DISC PATCH PANEL                    7
  0113       016101       THL PATCH PANEL                     2
  0114       016201       ASYNC PATCH PANEL                   4
  0115       016301       SYNC PATCHPANEL                     4
                  Enter C to continue or X to exit:  C
```

SCREEN 40

EQUIPMENT SERIAL NUMBER PROJECT LEVEL REPORT

Do you want a printed report? (Yes or No): N

Enter C to continue or X to exit:

SCREEN 41

EQUIPMENT SERIAL NUMBER PROJECT LEVEL REPORT

SITE	CLIN	FEATURE#	DESCRIPTION	EFFECT DATE	TOT QTY	COMPT QTY	SERIAL NUMBER
01	0102	010301	2 MEG MEMORY	841127	9	4	
01	0102	010301	2 MEG MEMORY	841127	9	3	
01	0102	010301	2 MEG MEMORY	841127	9	2	
01	0102	010301	2 MEG MEMORY	841127	9	1	
01	0104	013001	OSP WITH 6530	841127	1	1	
01	0105	013101	CENTRONIX PRINTER	841127	2	2	
01	0105	013101	CENTRONIX PRINTER	841127	2	1	
01	0106	013201	6530 CRT	841127	25	25	
01	0106	013201	6530 CRT	841127	25	24	
01	0106	013201	6530 CRT	841127	25	23	
01	0106	013201	6530 CRT	841127	25	22	
01	0106	013201	6530 CRT	841127	25	21	
01	0106	013201	6530 CRT	841127	25	20	
01	0106	013201	6530 CRT	841127	25	19	
01	0106	013201	6530 CRT	841127	25	18	

Enter C to continue or X to exit: C

SCREEN 42

SITE LEVEL REPORTS

[1] Report by EQUIPMENT type

[2] Report of MANUALS

[3] Report by SERIAL NUMBERS

[4] Return to the Reports Level Menu

SCREEN 43

EQUIPMENT SITE LEVEL REPORT

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:

SCREEN 44

EQUIPMENT SITE LEVEL REPORT

Do you want a printed report? (Yes or No): N

Enter C to continue or X to exit:

SCREEN 45

EQUIPMENT SITE LEVEL REPORT

SITE	CLIN	FEATURE#	DESCRIPTION	QTY
40	0001	000101	SITE POWER PREPARATIONS	1
40	0101	010201	NS-TXP, 2 MEG	13
40	0102	010301	2 MEG MEMORY	13
40	0104	013001	OSP WITH 6530	1
40	0105	013101	CENTRONIX PRINTER	3
40	0106	013201	6530 CRT	25
40	0107	013202	PRINTER INTERFACE	1
40	0108	015001	PATCH PANEL CABINET	3
40	0109	015101	SYSTEMS CABINET	4
40	0110	015201	I/O POWER MODULE	12
40	0109	015301	EXPANSION CABINET	1
40	0112	016001	DISC PATCH PANEL	5
40	0113	016101	THL PATCH PANEL	1
40	0114	016201	ASYNC PATCH PANEL	2
40	0115	016301	SYNC PATCHPANEL	2

Enter C to continue or X to exit: C

SCREEN 46

SITE LEVEL MANUAL REPORT

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:

SCREEN 47

SITE LEVEL MANUAL REPORT

Do you want a printed report? (Yes or No): N

Enter C to continue or X to exit:

SCREEN 48

SITE LEVEL MANUAL REPORT

SITE	CLIN	FEATURE#	DESCRIPTION	MANUAL DESCRIPTION
40	0101	010201	NS-TXP, 2 MEG	
40	0102	010301	2 MEG MEMORY	
40	0104	013001	OSP WITH 6530	
40	0105	013101	CENTRONIX PRINTER	
40	0106	013201	6530 CRT	
40	0107	013202	PRINTER INTERFACE	
40	0108	015001	PATCH PANEL CABINET	
40	0109	015101	SYSTEMS CABINET	
40	0110	015201	I/O POWER MODULE	
40	0109	015301	EXPANSION CABINET	
40	0112	016001	DISC PATCH PANEL	
40	0113	016101	THL PATCH PANEL	
40	0114	016201	ASYNC PATCH PANEL	
40	0115	016301	SYNC PATCHPANEL	
40	1101	110101	DISC CONTROLLER	

Enter C to continue or X to exit: C

SCREEN 49

SITE SERIAL NUMBER REPORT

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:

SCREEN 50

SITE SERIAL NUMBER REPORT

Do you want a printed report? (Yes or No): N

Enter C to continue or X to exit:

SCREEN 51

SITE SERIAL NUMBER REPORT

SITE	CLIN	FEATURE#	DESCRIPTION	EFFECT DATE	TOT QTY	COMPT QTY	SERIAL NUMBER
40	0109	015301	EXPANSION CABINET	851207	1	1	
40	0112	016001	DISC PATCH PANEL	851207	5	5	
40	0112	016001	DISC PATCH PANEL	851207	5	4	
40	0112	016001	DISC PATCH PANEL	851207	5	3	
40	0112	016001	DISC PATCH PANEL	851207	5	2	
40	0112	016001	DISC PATCH PANEL	851207	5	1	
40	0113	016101	THL PATCH PANEL	851207	1	1	
40	0114	016201	ASYNC PATCH PANEL	851207	2	2	
40	0114	016201	ASYNC PATCH PANEL	851207	2	1	
40	0115	016301	SYNC PATCHPANEL	851207	2	2	
40	0115	016301	SYNC PATCHPANEL	851207	2	1	
40	1101	110101	DISC CONTROLLER	851207	18	18	
40	1101	110101	DISC CONTROLLER	851207	18	17	
40	1101	110101	DISC CONTROLLER	851207	18	16	
40	1101	110101	DISC CONTROLLER	851207	18	15	

Enter C to continue or X to exit: C

SCREEN 52

```
DELIVERY ORDER DATE LEVEL REPORT

[1]   EQUIPMENT with unit costs
[2]   EQUIPMENT without unit costs
[3]   SERIAL NUMBERS
[4]   RETURN to the Reports Level Menu
```

SCREEN 53

```
DELIVERY ORDER LEVEL REPORT

-----------------------------------------------------------------------

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:
```

SCREEN 54

```
                    DELIVERY ORDER LEVEL REPORT
                      EFECTIVE DATE: 851207

        The following Delivery Order Effective Dates exist for Site 40
-------------------------------------------------------------------------
                 851207          841127          850404
                 851020          851110




                        Enter C to continue or X to exit:
```

SCREEN 55

```
                    DELIVERY ORDER LEVEL REPORT
                      EFFECTIVE DATE: 851207
-------------------------------------------------------------------------




            Do you want a printed report?  (Yes or No):  N




                        Enter C to continue or X to exit:
```

SCREEN 56

DELIVERY ORDER LEVEL REPORT
EFFECTIVE DATE: 851207

SITE	CLIN	FEATURE#	DESCRIPTION	QTY	UNIT PRICE
40	0001	000101	SITE POWER PREPARATIONS	1	101886.00
40	0101	010201	NS-TXP, 2 MEG	13	86760.00
40	0102	010301	2 MEG MEMORY	13	19800.00
40	0104	013001	OSP WITH 6530	1	13387.50
40	0105	013101	CENTRONIX PRINTER	3	1615.50
40	0106	013201	6530 CRT	25	2317.50
40	0107	013202	PRINTER INTERFACE	1	409.50
40	0108	015001	PATCH PANEL CABINET	3	2250.00
40	0109	015101	SYSTEMS CABINET	4	14220.00
40	0110	015201	I/O POWER MODULE	12	3150.00
40	0109	015301	EXPANSION CABINET	1	2250.00
40	0112	016001	DISC PATCH PANEL	5	697.50
40	0113	016101	THL PATCH PANEL	1	315.00
40	0114	016201	ASYNC PATCH PANEL	2	697.50
40	0115	016301	SYNC PATCHPANEL	2	697.50

Enter C to continue or X to exit: C

SCREEN 57

DELIVERY ORDER LEVEL REPORT

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:

SCREEN 58

```
                    DELIVERY ORDER LEVEL REPORT
                      EFFECTIVE DATE: 851207

      The following Delivery Order Effective Dates exist for Site 40
-------------------------------------------------------------------------
            851207          841127          850404
            851020          851110




                      Enter C to continue or X to exit:
```

SCREEN 59

```
                    DELIVERY ORDER LEVEL REPORT
                      EFFECTIVE DATE: 851207

-------------------------------------------------------------------------




          Do you want a printed report?  (Yes or No):  N




                      Enter C to continue or X to exit:
```

SCREEN 60

DELIVERY ORDER LEVEL REPORT
EFFECTIVE DATE: 851207

SITE	CLIN	FEATURE#	DESCRIPTION	QTY	MODEL NUMBER
40	0001	000101	SITE POWER PREPARATIONS	1	
40	0101	010201	NS-TXP, 2 MEG	13	1432
40	0102	010301	2 MEG MEMORY	13	2432
40	0104	013001	OSP WITH 6530	1	3910
40	0105	013101	CENTRONIX PRINTER	3	
40	0106	013201	6530 CRT	25	6530
40	0107	013202	PRINTER INTERFACE	1	
40	0108	015001	PATCH PANEL CABINET	3	7105
40	0109	015101	SYSTEMS CABINET	4	7104
40	0110	015201	I/O POWER MODULE	12	7301
40	0109	015301	EXPANSION CABINET	1	7107
40	0112	016001	DISC PATCH PANEL	5	7504
40	0113	016101	THL PATCH PANEL	1	7506
40	0114	016201	ASYNC PATCH PANEL	2	7501
40	0115	016301	SYNC PATCHPANEL	2	7502

Enter C to continue or X to exit: C

SCREEN 61

SITE SERIAL NUMBER REPORT

Enter site number for which the report is desired: 01

Enter C to continue or X to exit:

SCREEN 62

```
                    SITE SERIAL NUMBER REPORT
                      EFFECTIVE DATE: 851207

    The following Delivery Order Effective Dates exist for Site 40
-------------------------------------------------------------------------
          851207              841127              850404
          851020              851110

                    Enter C to continue or X to exit:
```

SCREEN 63

```
                    SITE SERIAL NUMBER REPORT
                      EFFECTIVE DATE: 851207

-------------------------------------------------------------------------

          Do you want a printed report?  (Yes or No):  N

                    Enter C to continue or X to exit:
```

SCREEN 64

SITE SERIAL NUMBER REPORT
EFFECTIVE DATE: 851207

SITE	CLIN	FEATURE#	DESCRIPTION	EFFECT DATE	TOT QTY	COMPT QTY	SERIAL NUMBER
40	0001	000101	SITE POWER PREPARATIONS	851207	1	1	
40	0101	010201	NS-TXP, 2 MEG	851207	13	13	
40	0101	010201	NS-TXP, 2 MEG	851207	13	12	
40	0101	010201	NS-TXP, 2 MEG	851207	13	11	
40	0101	010201	NS-TXP, 2 MEG	851207	13	10	
40	0101	010201	NS-TXP, 2 MEG	851207	13	9	
40	0101	010201	NS-TXP, 2 MEG	851207	13	8	
40	0101	010201	NS-TXP, 2 MEG	851207	13	7	
40	0101	010201	NS-TXP, 2 MEG	851207	13	6	
40	0101	010201	NS-TXP, 2 MEG	851207	13	5	
40	0101	010201	NS-TXP, 2 MEG	851207	13	4	
40	0101	010201	NS-TXP, 2 MEG	851207	13	3	
40	0101	010201	NS-TXP, 2 MEG	851207	13	2	
40	0101	010201	NS-TXP, 2 MEG	851207	13	1	
40	0102	010301	2 MEG MEMORY	851207	13	13	

Enter C to continue or X to exit: C

SCREEN 65

MAINTENANCE DELIVERY ORDER GENERATION PROGRAM

Generate maintenance Delivery Order for Site Number: 40

DISCOUNT and ESCALATION RATES

Values input are added to one (1) to generate the correct discount or escalation rates

LCN Hardware Maintenance Escalation Rate: 0.100
LCN Software Maintenance Escalation Rate: 0.100
SPLICENet Maintenance Discount Rate: 0.000
Site Maintenance Escalation Rate: 0.822

File name to be imported into LOTUS 1-2-3: NEWDO.PRN

SCREEN 66

MAILING LABEL GENERATION PROGRAM

Number of copies for each label: 01

Site Number: 01

SPLICE SITE MAILING LABELS

SCREEN 67

INSTALLATION PROCEDURES

Before using the integrated Configuration Management System, make a backup copy of all five disks. Work with the backup copy and store the original disks safely away. This will allow the initial files to be restored if files are erased, damaged or an accident occurs.

Before the integrated Configuration Management System may be used, it must be installed on a micro-computer. Installation is easily accomplished using a DOS command batch file supplied on the **Initial Startup Disk.** Programs were developed on an IBM-PC environment and tested on an IBM-PC AT. System performance on other than a 100% IBM compatible configuration is unknown and without guaruntee.

The integrated Configuration Management System must be run on a hard disk system configuration. This is a limitation caused by the size and number of dBASE files which are part of the system.

The integrated Configuration Management System consists of five disks, one installation disk and four system disks. Each disk is labelled to reflect the portion of the system residing on each disk. The label identifies the directory where the system files must be loaded. Three directories will be created during the installation process if they do not already exist. These **directory names may not be modified.** System execution is dependent on files existing in predefined locations.

Ensure the system default drive is the hard disk where the integrated system is to be loaded (ex: C> or D>, etc.). Start system installation by placing the disk labelled **Initial Startup Disk** in drive A. Type the command **STARTUP** and follow the instructions and messages displayed on the screen.

APPENDIX B

THE NAVAL SUPPLY SYSTEMS COMMAND

STOCK POINT LOGISTICS INTEGRATED COMMUNICATIONS ENVIRONMENT

(SPLICE)

SYSTEM CONFIGURER AND CONFIGURATION MANAGEMENT SYSTEM

MAINTENANCE MANUAL

Document No. BBC - 02

1 January 1986

Record of Changes

Original	1 February 1986

List of Effective Pages

Page 1 through 285	Original

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EQPDTPRC.PRG ---------- 140

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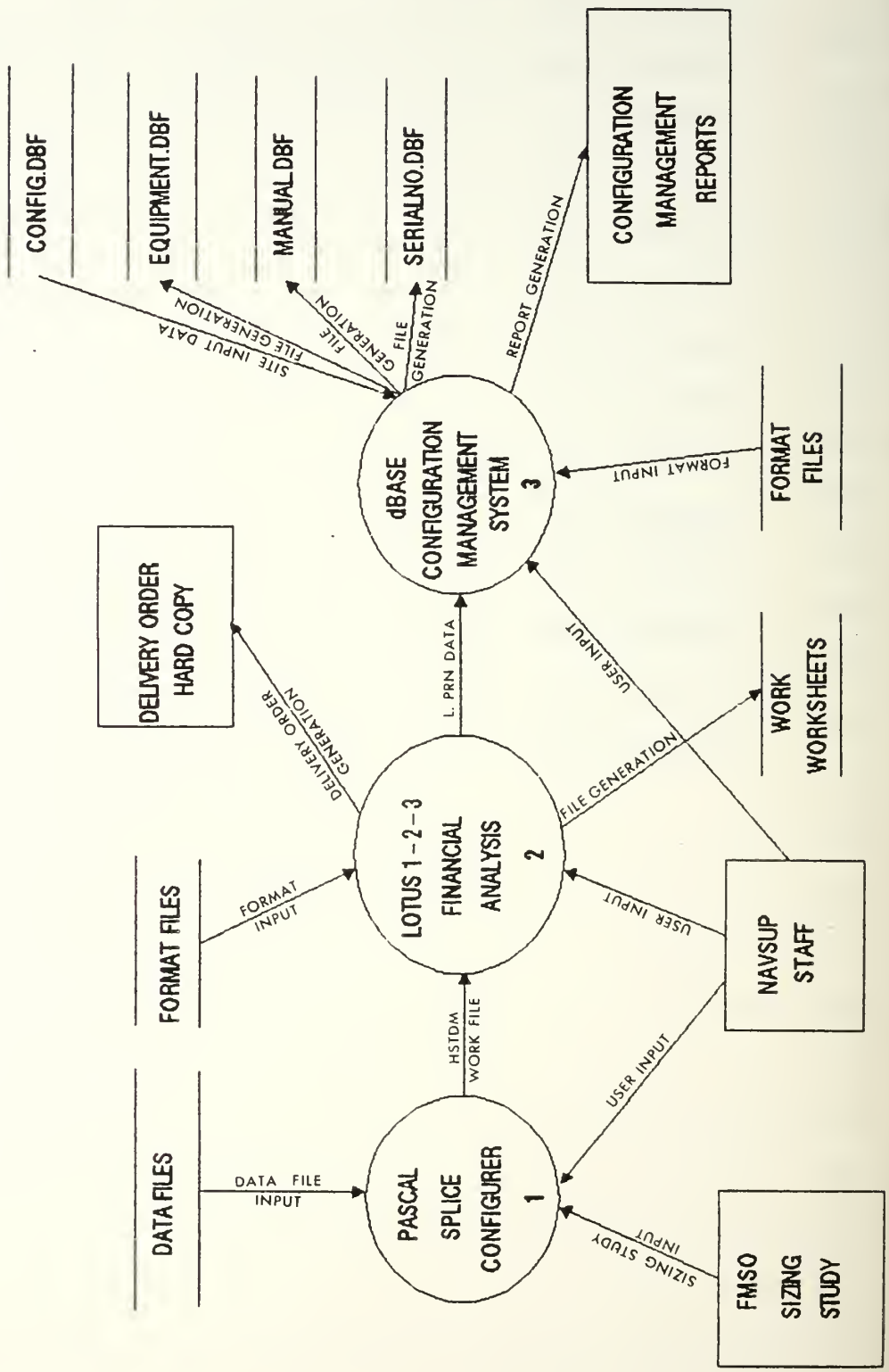
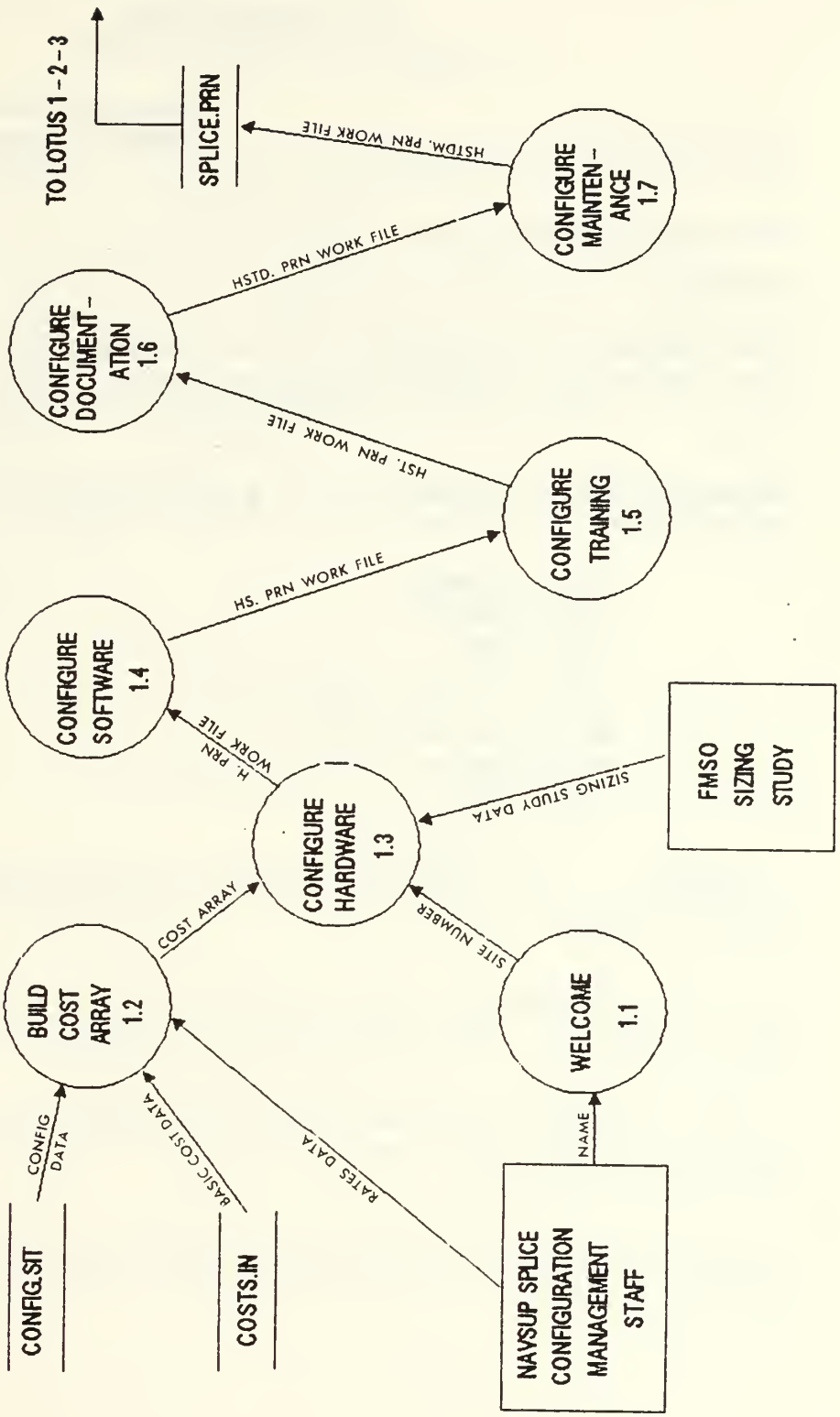
OVERALL SYSTEM DATA FLOW DIAGRAM



CONFIGURER DATA FLOW DIAGRAM
LEVEL 1



FILE DESCRIPTION

PROJECT: SPLICE CONFIGURER
DATE: 3 September 1985

FILE OR DATABASE NAME: CONFIG.SIT

ALIASES: None

COMPOSITION: The CONFIG.SIT file contains the site specific data associated with all the designated Stock Point Logistics Integrated Communications Environment (SPLICE) sites.

ORGANIZATION: Sequential. The structure of the file is as follows:

	DATA ELEMENT	TYPE VARIABLE
	Site Number	Integer
	Site Name	String
	Documentation Site Group	Integer
	Training Site Group	Integer
*	Maintenance Option	String
*	Maintenance Responsibility	String
	Site Type	String
	Installation Cost	Real

* **NOTES:** These data elements are not currently designated for implementation, but are specified for use in later revisions.

1. Site Number range can be from one (1) to sixty-two (62). Current only fifty-six (56) sites are designated SPLICE sites and is the upper range limit.

2. Documentation Site Group is used to restrict the maximum number of documentation sets that each site is allowed to receive.

3. Training Site Group is used to restrict the maximum number of training courses that each site is allowed to receive.

FILE DESCRIPTION (Continued)

4. Maintenance Option and Maintenance Responsibility are used together to establish the maintenance repair and response times desired by each site.

5. Site Type restricts various hardware options to certain designated sites. The value is either "S" or "M". "S" designates a site as a Stock Point which can receive all hardware/software options. "M" designates a site as a Multiple Activity Processing System (MAPS) site which is not permitted to receive Local Computer Network (e.g. HYPERchannel) components.

6. Installation Cost is a one time cost that is paid to the vendor for his initial site survey and installation preparations.

DATA FLOW DESCRIPTION

PROJECT: SPLICE CONFIGURER
DATE: 3 September 1985

DATAFLOW NAME: Config_Data

ALIASES: None

COMPOSITION: The data represented in this flow is the data coming from the input file "CONFIG.SIT". The site number selected for configuration is located within the CONFIG.SIT file and site unique information is extracted. This unique site configuration data is then used to create the site information record. This record is used to determine the maximum limits applicable to sites under configuration, as specified in the notes to the CONFIG.SIT file description. The site information record also is used to determine which repair and maintenance options are to be selected and serves to restrict certain types of options from being selected, depending upon the sites type designation. The Site Preparations Charge is taken from the CONFIG.SIT file and input as the first entry in the COSTTABLE array.

NOTES: The user was previously prompted for the number of the site to be configured.

PROCESS DESCRIPTION

PROJECT: SPLICE CONFIGURER
DATE: 3 September 1985

PROCESS NAME: Build Cost Array

PROCESS NUMBER: 1.2

PROCESS DESCRIPTION:

1. Take a feature number for each element resident in the input cost file and place it in a feature number field in the cost array.

2. Take a contract line item number for each element resident in the input cost file and place it in a contract line item number field in the cost array.

3. Take a nomenclature description for each element resident in the input cost file and place it in an item description field in the cost array.

4. Take the unit maintenance costs from the input cost file and place it in the fourth element of the cost array.

5. Take the unit purchase price from the input cost file and apply a discount rate specified by the user. Place the result in the fifth element of the cost array.

6. Take the unit installation cost from the input cost file and apply an escalation rate specified by the user. Place the result in the sixth element of the cost array.

7. Take the basic monthly maintenance rate from the input cost file and apply an escalation rate specified by the user. Place the result in the seventh element of the cost array.

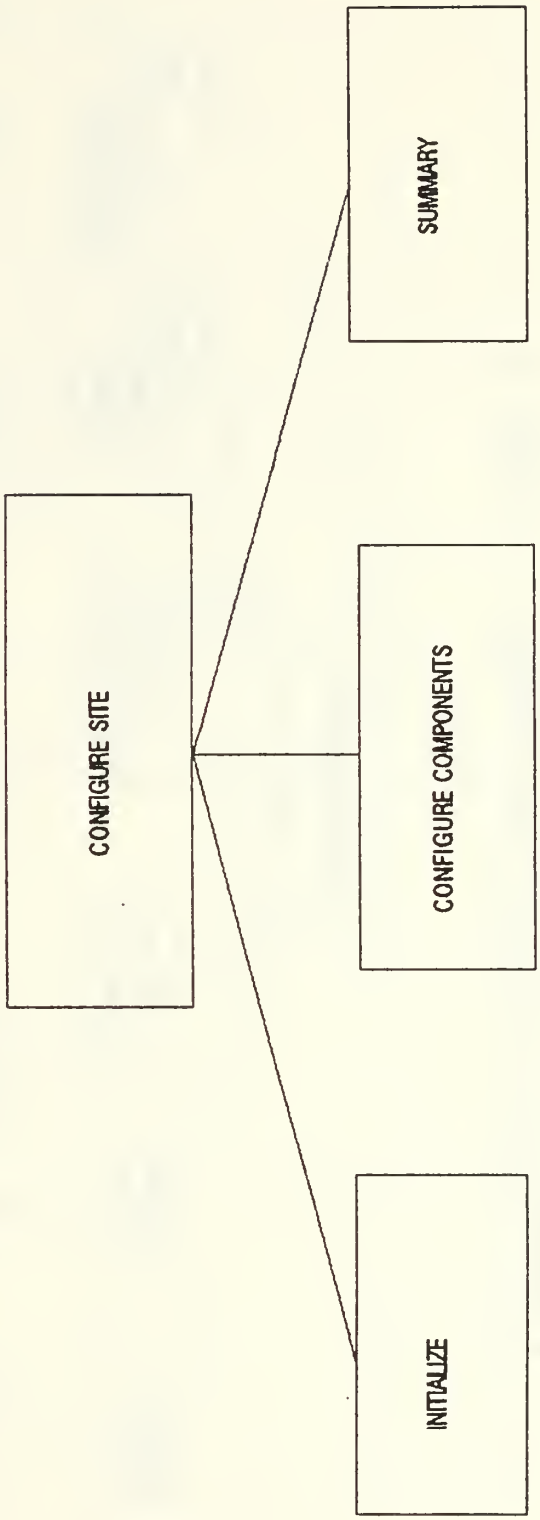
PROCESS DESCRIPTION (Continued)

NOTES: The cost array mentioned on the previous page is a two dimensional memory array. The array contains an entry for every line item identified on the Automated Data Processing Selection Office (ADPSO) SPLICE contract. The maximum number of entries expected is two hundred. This estimate is based upon the maximum number of possible line items that may exist for available selections. The site cost array structure is planned as follows:

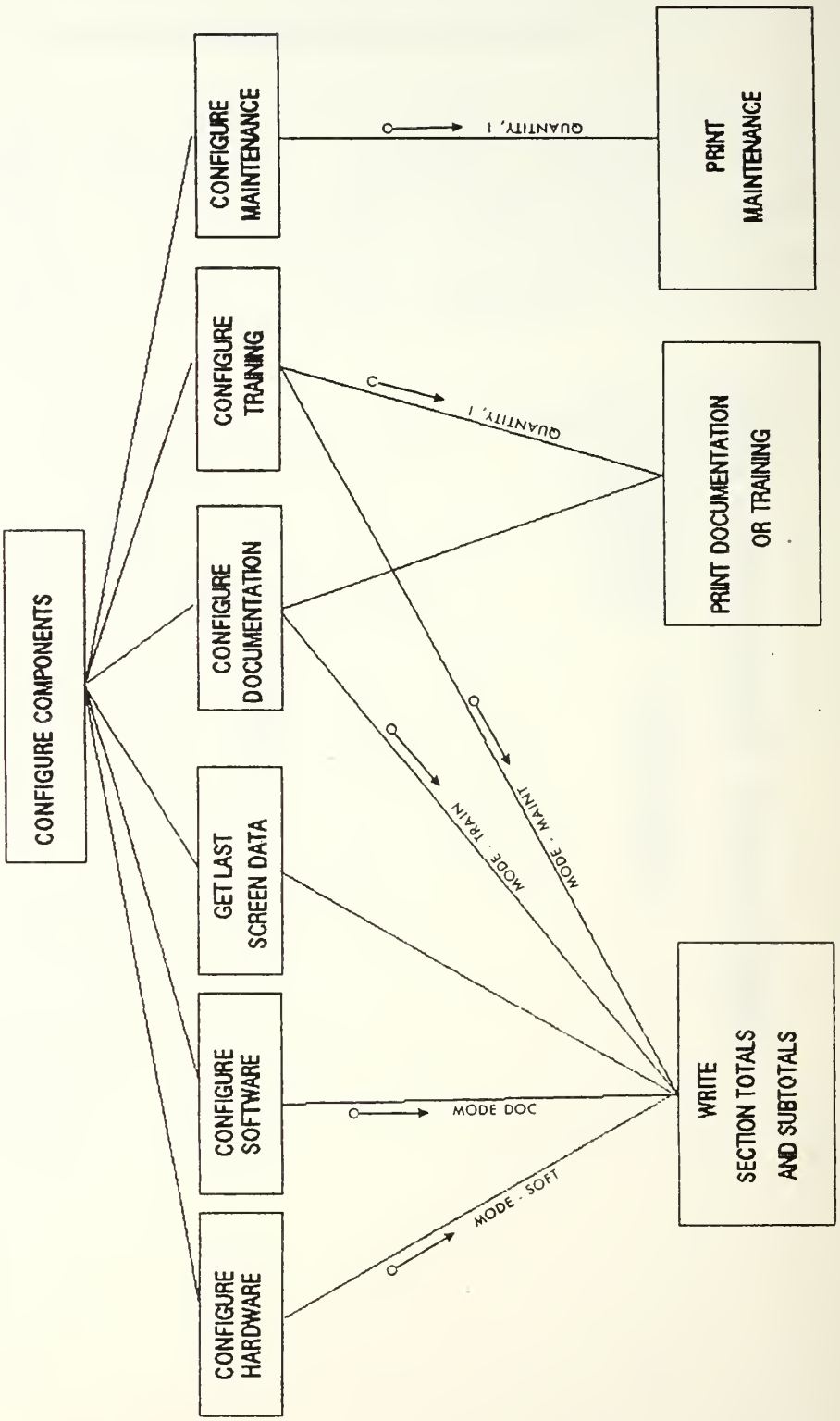
FEATURE NUMBER	VARIABLE TYPE
Contract Line Item Number (CLIN)	String
CLIN Description	String
Monthly Maintenance	Real
CLIN Unit Price	Real
Installation Cost	Real
Basic Monthly Maintenance Cost	Real

CONFIGURER STRUCTURE CHART

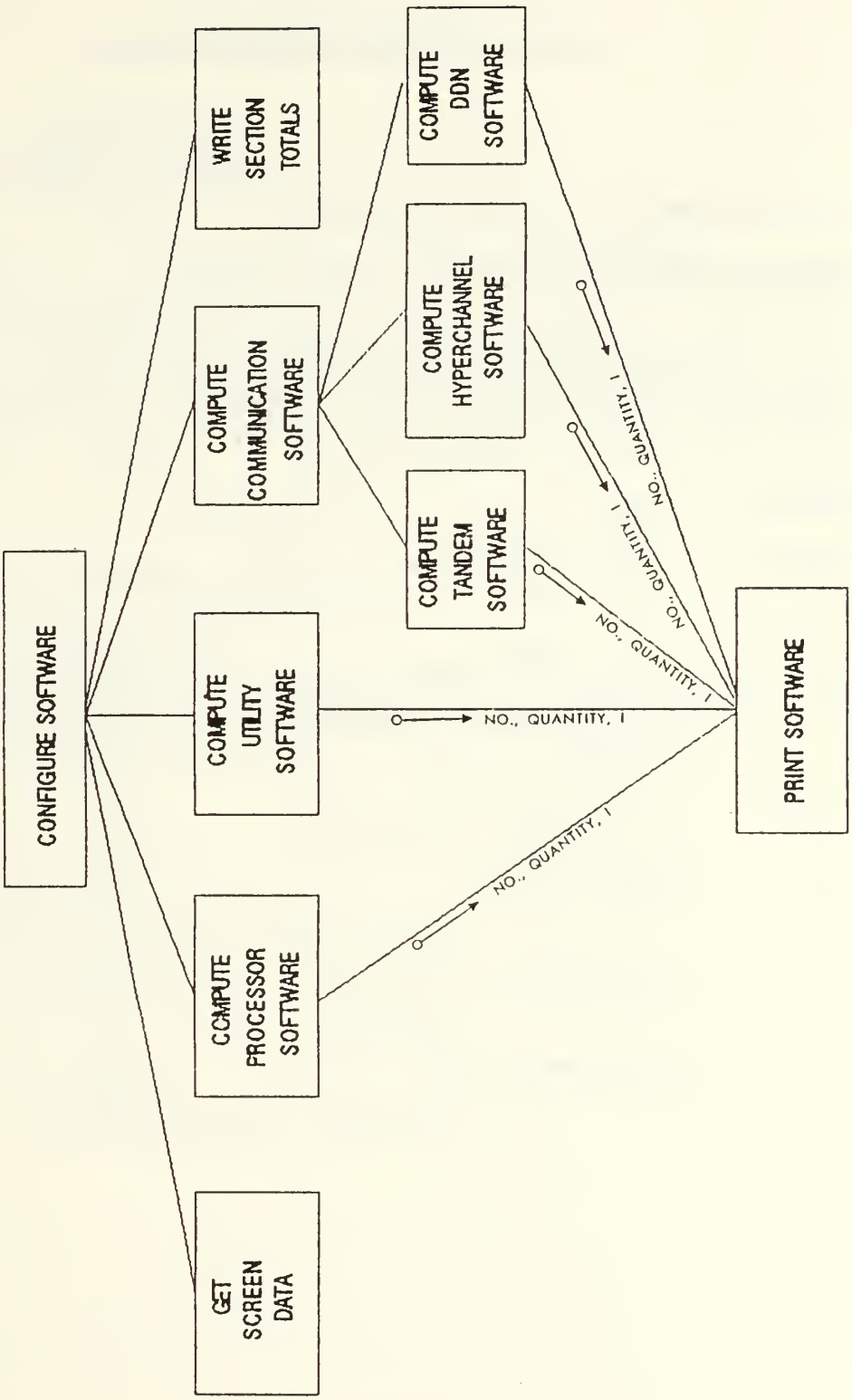
OVERVIEW - LEVEL 0



CONFIGURER STRUCTURE CHART – LEVEL 1



CONFIGURER STRUCTURE CHART – LEVEL 2



MODULE DESCRIPTION

SPLICE DESIGN
DATE: 3 September 1985

MODULE NAME: Print_Software

MODULE PURPOSE: This routine writes software related contract line item numbers (CLINs) to the output disk file. It invokes global procedure LINE_SETUP to generate the CLIN and accumulate section and appropriation totals. The global variable Quantity is used to compute the CLIN extended price and installation costs. The procedure is not used in maintenance computations.

INPUT: None.

OUTPUT: CLIN related data elements written to output disk file are:

Line_Number	String- 7
CostTable[I].featureno	String- 8
CostTable[I].descript	String-28
Quantity	Integer-3
CostTable[I].purchprice	Real-13, 2 decimals
Extended_Price	Real-12, 2 decimals
CostTable[I].basemaint	Real- 9, 2 decimals
Maint_Factor	Real- 8, 3 decimals
Maint_Months	Integer-5
CostTable[I].basemaint * Maint_Factor * Maint_Months	Real- 9, 2 decimals
CostTable[I].instcost	Real- 8, 2 decimals
CostTable[I].instcost * Quantity	Real- 9, 2 decimals
Downtime_Credit	Real- 9, 2 decimals
CostTable[I].basemaint * Quantity * Maint_Factor	Real- 9, 2 decimals

MODULE DESCRIPTION (Continued)

PROCEDURAL DESCRIPTION:

```
Begin   [Print Software]
    CASE Type_Software of
        1:  Begin   { Per Processor Software }
                Maint_Factor = Momaint_Esc_Cost
                Extended_Price = Quantity * CostTable
            End
        2:  Begin   { Per Site Software }
                Maint_Factor = Momaint_Esc_Cost
                Extended_Price = CostTable[I].purchprice
            End
        3:  Begin   { NETEX Software }
                Maint_Factor = 1
                Extended_Price = CostTable[I].purchprice
                                 * Quantity
            End
    END [End of CASE Statement]
    CALL LINE_SETUP
    Compute_System_Downtime_Component       * See Notes
    Compute_Downtime_Credit                 * See Notes
    Write_CLIN_Data_Elements_to_Output_Disk_File
End     [Print_Software]
```

MODULE DESCRIPTION (Continued)

VARIABLES:

PROGRAM GLOBALS: See CONFIGURE_SITE module description

MODULE LOCALS: None.

PROCEDURE LOCALS:

1: Type_Software - Integer, parameter list variable, Range: 1-3, code controlling which values are assigned to the variables Maint_Factor and Extended_Price.

NOTES:

1. Computation for System_Downtime_Component:
```
System_Downtime_Component + (Maint_Factor *
          Quantity * CostTable[I].basemaint)
```

2. Computation for Downtime_Credit:
```
(((CostTable[I].purchprice +CostTable[I].instcost)
/48) +(CostTable[I].basemaint * Maint_Factor))
* 0.005
```

PASCAL CONFIGURER RECORD DESCRIPTIONS

1. COSTS.IN - file contains the individual contract line items which appear as line items on the generated delivery order.

COLUMN POSITION	FIELD LENGTH	DATA ELEMENT DESCRIPTION
01-04	4	Contract Line Item Number (CLIN)
05	1	Blank (Filler)
06-11	6	Contract Feature Number
12	1	Blank (Filler)
13-39	27	Component Description
40-48	9	Basic Contract Maintenance Rate
49	1	Blank (Filler)
50-60	11	Basic Contract Purchase Price
61	1	Blank (Filler)
62-69	8	Basic Contract Installation Rate
70-80	11	Blank (Filler)

NOTE: All data elements are left justified. This file is read into a memory array (COSTTABLE). The data elements are modified by the discount and escalation rates entered by the user. The file is maintained in Contract Feature Number sequence, with two exceptions. T-Text and TRANSFER line items are not in Contract Feature Number sequence. Use extreme care when adding components and corresponding line items in the source code. Line items are identified in the source code by using ccmments. An example of a comment is { I=6 Serial Printers }.

PASCAL CONFIGURER RECORD DESCRIPTIONS (Continued)

2. CONFIG.SIT - file contains site specific information used to determine several factors required in the configuration process.

COLUMN POSITION	FIELD LENGTH	DATA ELEMENT DESCRIPTION
01-02	2	Site Number
03-30	28	Site Name
31	1	Documentation Site Group
32	1	Blank (Filler)
33	1	Training Site Group
34	1	Blank (Filler)
35-38	4	Maintenance Option
39	1	Blank (Filler)
40	1	Maintenance Responsibility
41	1	Blank (Filler)
42	1	Site Type (Stock Point or MAP Site)
43	1	Blank (Filler)
44-49	6	Installation Cost
50-80	31	Blank (Filler)

NOTE: All data elements are left justified. Site specific information is read into a memory array (SITEINFO). The file is maintained in site number sequence. Site installation costs were obtained from NAVSUP SPLICE personnel. Installation costs reflect costs originally specified in the SPLICE contract. If these costs are not correct or are revised, update the site preparation charges in CONFIG.SIT prior to running the configurer.

CONFIG.SIT Program Listing

1	01	ASO PHILADELPHIA, PA	2	2	X	A	S	81735.0
2	02	FMSO MECHANICSBURG, PA	1	2	III	B	S	93939.0
3	03	FMSO MECHANICSBURG, PA	4	4	I	F	M	56721.0
4	04	MCAS CHERRY POINT, NC	3	3	VIII	C	M	70860.0
5	05	MCAS EL TORO, CA	3	3	II	D	M	76473.0
6	06	MCAF QUANTICO, VA	4	4	P	F	M	59748.0
7	07	MCAS YUMA, AZ	4	4	I	F	M	59748.0
8	08	NAC INDIANAPOLIS, IN	4	4	P	A	M	59748.0
9	09	NARDAC JACKSONVILLE, FL	2	2	VIII	A	S	188471.0
10	10	NARDAC NEW ORLEANS, LA	2	2	P	A	S	73918.0
11	11	NARDAC NORFOLK, VA	2	2	VIII	A	S	74913.0
12	12	NARDAC PENSACOLA, FL	2	2	VIII	A	S	76523.0
13	13	NARDAC SAN DIEGO, CA	2	2	VIII	A	S	74829.0
14	14	NARDAC SAN FRANCISCO, CA	2	2	VIII	A	S	75967.0
15	15	NARDAC WASHINGTON, DC	4	4	P	F	S	59748.0
16	16	NAS BARBERS POINT, HI	4	4	I	F	M	59748.0
17	17	NAS BRUNSWICK, ME	4	4	I	F	M	59748.0
18	18	NAS CECIL FLIELD, FL	4	4	I	F	M	59748.0
19	19	NAS KEY WEST, FL	4	4	I	F	M	59748.0
20	20	NAEC LAKE HURST, NJ	4	4	I	F	M	59748.0
21	21	NAS MEMPHIS, TN	4	4	I	F	M	59748.0
22	22	NAS MIRAMAR, CA	4	4	I	F	M	59748.0
23	23	NAS OCEANA, VA	4	4	I	F	M	59748.0
24	24	NAS PENSACOLA, FL	4	4	I	F	M	59748.0
25	25	NAS WHIDBEY ISLAND, WA	3	3	P	D	M	68448.0
26	26	NATC PATUXENT RIVER, MD	3	3	II	D	M	63841.0
27	27	PMTC POINT MUGU, CA	4	4	I	F	M	59748.0
28	28	NAVDAF Corpus Christi, TX	4	4	I	F	M	59748.0
29	29	NAVDAF GREAT LAKES, IL	4	4	I	F	M	59748.0
30	30	NAVDAF LEMOORE, CA	4	4	I	F	M	59748.0
31	31	NAVDAF MOFFETT FIELD, CA	4	4	I	F	M	59748.0
32	32	NAVDAF ORLANDO, FL	4	4	I	F	M	59748.0
33	33	NRCC LONG BEACH, CA	4	4	I	F	S	57816.0
34	34	NRCC NEWPORT, RI	4	4	I	F	S	57816.0
35	35	NRCC PHILADELPHIA, PA	4	4	I	F	S	57816.0
36	36	NRCC WASHINGTON, D.C.	4	4	I	F	S	57816.0
37	37	NUWES KEYPORT, WA	4	4	I	F	M	59748.0
38	38	NAVSTA Mayport, FL	4	4	I	F	M	59748.0
39	39	NSC CHARLESTON, SC	2	2	VIII	A	S	78279.0
40	40	NSC NORFOLK, VA	2	2	X	A	S	101886.0
41	41	NSC OAKLAND, CA	2	2	V	A	S	94646.0
42	42	NSC PEARL HARBOR, HI	2	2	VIII	A	S	89493.0
43	43	NSC PUGET SOUND, WA	2	2	VIII	A	S	89493.0
44	44	NSC SAN DIEGO, CA	2	2	V	A	S	95520.0
45	45	NSD GUAM	3	3	VII	E	S	101824.0
46	46	NSD SUBIC BAY, PI	3	3	P	E	S	102835.0
47	47	NSD YOKOSUKA, JAPAN	3	3	VII	E	S	108835.0
48	48	NSY PHILADELPHIA, PA	4	4	I	E	M	59748.0
49	49	NSY PORTSMOUTH, NH	4	4	I	E	M	59748.0
50	50	NTC SAN DIEGO, CA	4	4	I	F	M	59748.0

```
51|  51 SPCC MECHANICSBURG, PA      2 2 X    A S 95520.0
52|  52 SUBASE KINGS BAY, GA        4 4 VIII D M 59748.0
53|  53 SUBASE NEW LONDON, CN       4 4 I    F M 59748.0
54|  54 SUBASE PEARL HARBOR, HI     4 4 I    F M 59748.0
55|  55 SWFPAC BREMERTON, WA        3 3 VI   E M 88507.0
56|  56 TRF BANGOR, WA              4 4 P    E S 88507.0
57|  57 SWFPAC KINGS BAY, GA        3 3 VI   E M 88507.0
58|  58 TRF KINGS BAY, GA           4 4 P    E S 88507.0
```

Page 1 COSTS.IN Program Listing

1	0001	000101	SITE POWER PREPARATIONS	0.0	0.0	0.0
2	0101	010201	NS-TXP, 2 MEG	439.2	96400.0	700.0
3	0102	010301	2 MEG MEMORY	89.06	22000.0	113.0
4	0103	012401	FLTG PT ARITH		2000.0	100.0
5	0104	013001	OSP WITH 6530	198.86	14875.0	300.0
6	0105	013101	CENTRONIX PRINTER	30.0	1795.0	0.0
7	0106	013201	6530 CRT	35.38	2575.0	100.0
8	0107	013202	PRINTER INTERFACE	2.44	455.0	0.0
9	0108	015001	PATCH PANEL CABINET	0.0	2500.0	400.0
10	0109	015101	SYSTEMS CABINET	202.52	15800.0	600.0
11	0110	015201	I/O POWER MODULE	48.8	3500.0	600.0
12	0109	015301	EXPANSION CABINET	0.0	2500.0	400.0
13	0112	016001	DISC PATCH PANEL	0.0	775.0	75.0
14	0113	016101	THL PATCH PANEL	0.0	350.0	0.0
15	0114	016201	ASYNC PATCH PANEL	7.32	775.0	75.0
16	0115	016301	SYNC PATCHPANEL	7.32	775.0	75.0
17	1101	110101	DISC CONTROLLER	70.76	10500.0	200.0
18	1201	120201	DISC, WINCHESTER, 128MB	123.22	19500.0	325.0
19	1202	120301	DRAWER, WINCHESTER, 128MB	123.22	16500.0	325.0
20	1301	130201	DISC, MOVING HEAD, 240MB	253.76	26500.0	450.0
21	1401	140201	DISC, WINCHESTER, 540MB	395.28	39500.0	625.0
22	2101	210101	TAPE CONTROLLER	41.48	6100.0	100.0
23	2102	210201	TAPE DRIVE/FORMATTER	469.7	47500.0	475.0
24	24	240101	CARD RDR/PNCH	191.0	20442.0	75.0
25	24	240201	CARD READER	56.12	5600.0	175.0
26	2701	270101	LP/CR CONTROLLER	24.4	2800.0	188.0
27	2702	270201	1000 LPM PRINTER	202.52	20000.0	100.0
28	27	270301	600 LPM PRINTER	202.52	14000.0	100.0
29	31	310101	INTRPROC BUS(INCL.W/010101)	0.0	0.0	0.0
30	31	310201	FIBER OPTIC LINK CNTRL	610.00	35000.0	450.0
31	31	310202	FIBER OPTIC CABLES	0.0	3750.0	0.0
32	3201	320101	TANDEM/P-E HC ADAP	215.0	38940.0	0.0
33	3202	320102	HC ADAPTER 2ND TRUNK INTER	28.0	4705.0	0.0
34	3203	320201	HC CABINET (3 ADAP)	14.0	3760.0	0.0
35	3204	320301	THL CONTROLLER	194.22	14900.0	300.0
36	3207	320400	HC TRUNK, 500 FT.	0.0	400.0	0.0
37	3207	320401	HC TRUNK, 1000 FT	0.0	800.0	0.0
38	32	320402	HC TRUNK, 1500 FT.	0.0	3075.0	0.0
39	32	320403	HC TRUNK, 2500 FT.	0.0	6250.0	0.0
40	32	320404	HC TRUNK, 4000 FT.	0.0	12600.0	0.0
41	32	320405	HC TRUNK, 5000 FT.	0.0	22750.0	0.0
42	3301	330101	BURROUGHS HTC HC	215.0	38440.0	0.0
43	3302	330201	BURROUGHS DLP HC	215.0	38440.0	0.0
44	3303	330301	ECBDIC-ASCII RAM	16.0	3225.0	0.0
45	34	340301	HC PROC I/F(P.E./INTERDATA)	19.0	4060.0	0.0
46	36	360101	HC ADATPER (IBM 360/370)	215.0	39515.0	0.0
47	37	370101	HC ADAPTER(UNIVAC 1100,490)	215.0	38440.0	0.0
48	41	410101	HC ADAPTER(FIPS DEVICE)	215.0	39515.0	0.0
49	42	420301	HC PROC I/F (MINI-COMPUTER)	19.0	4000.0	0.0
50	4501	450101	ASYNCH CNTR	21.96	3600.0	125.0

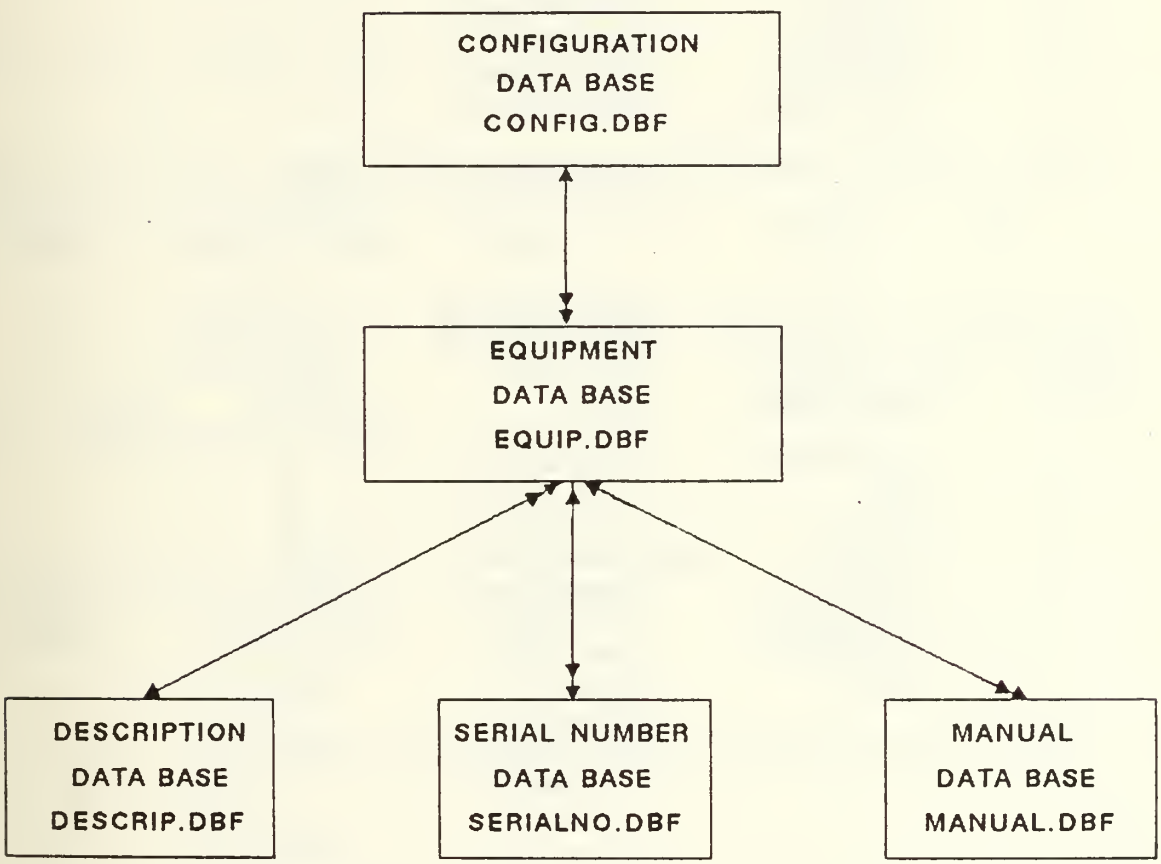
51	4502	450102	ASYNCH EXTENSION BOARD	26.84	4300.0	188.0
52	4503	450103	AUTOMATIC CALLING UNIT	8.19	1540.0	0.0
53	4504	450301	COMM SUBSYSTEM BASE	160.0	23673.0	630.0
54	4505	450302	BASE ADD-ON	124.0	19374.0	500.0
55	4506	450303	RS-232 LIU/CABLE	12.0	1869.0	157.0
56	4507	450304	6100 CABLE/30M	0.0	145.0	0.0
57	4508	450305	6100 CABLE/45M	0.0	160.0	0.0
58	4509	450306	6100 CABLE/60M	0.0	175.0	0.0
59	4601	460101	BIT SYNCH CNTR	50.02	6059.0	125.0
60	4602	460201	BYTE SYNCH CNTR	35.38	5800.0	100.0
61	4701	470101	COMM.PATCH PANEL/LINE MON	140.4	6653.0	100.0
62	4702	470201	ARCLI	7.02	5145.0	5.0
63	5101	510101	GUARDIAN OS	158.6	3500.0	125.0
64	5102	510201	BATCH SUBSYSTEM	61.0	4444.0	0.0
65	5103	510301	FDC SYS UTILITIES	125.0	1000.0	0.0
66	5201	520101	ENCOMPASS	323.3	8000.0	150.0
67	5202	520102	ENABLE (P/O 520101)	67.1	1500.0	0.0
68	5203	520103	ENFORM (P/O 520101)	85.4	2000.0	0.0
69	5204	520104	PATHWAY (P/O 520101)	103.7	2500.0	0.0
70	5205	520105	TMF (P/O 520101)	122.0	2500.0	0.0
71	5206	520106	DDL (P/O 520101)	36.6	500.0	0.0
72	5207	520107	FDC TPS SAS	240.0	3500.0	0.0
73	5308	530102	ENSCRIBE (P/O 510101)	0.0	0.0	0.0
74	5309	530103	SORT/MERGE (P/O 510101)	0.0	0.0	0.0
75	5310	530104	FUP(FILE UTIL PRG,P/O5101010	.0	0.0	0.0
76	5311	530105	PUP(PERIP UTL PRG,P/O5101010	.0	0.0	0.0
77	5312	530106	BACKUP/RESTORE(P/O 510101)	0.0	0.0	0.0
78	5313	530107	FILE SYSTEM SECURITY	600.0	5000.0	0.0
79	5314	530108	SYSTEM CARD READER SUPPORT	0.0	0.0	0.0
80	5401	540201	SPOOLER (P/O 510101)	24.4	500.0	0.0
81	5502	550102	ENVOY (P/O 510101)	0.0	0.0	0.0
82	5502	550103	CUP(COM UTL PRG,P/O 510101)	0.0	0.0	0.0
83	5503	550201	EXPAND	122.0	2000.0	50.0
84	5504	550301	EXCHANGE RJE HASP	24.4	500.0	50.0
85	5505	550401	AM3270 ACCESS METHOD	24.4	500.0	50.0
86	5506	550501	X25 ACCESS METHOD	24.4	500.0	50.0
87	5507	550601	HYPER LINK ACC MD(P/O5101010	.0	0.0	0.0
88	5508	550602	LCN FUP SUPPORT	0.0	0.0	0.0
89	5509	550701	DELETED FDC CRT SUPPORT	350.0	13000.0	0.0
90	5510	550702	6100 ATP	27.0	430.0	50.0
91	55	550703	6100 BSC	27.0	430.0	50.0
92	55	550704	6100 ADCCP	27.0	430.0	50.0
93	55	550705	6100 TINET	27.0	430.0	50.0
94	5528	550706	BURR POLL/SELECT	27.0	430.0	50.0
95	5530	550707	SNAX AND SNAX/HLS	27.0	430.0	102.0
96	5528	550708	TR 3271	54.0	860.0	78.0
97	5530	550709	AM 6520	27.0	430.0	50.0
98	55	550710	FDC SNA INTERFACE PACKAGE	350.0	84000.0	0.0
99	55	550711	FDC DLANET INTERFACE PKG	400.0	25000.0	0.0
100	5511	550801	BURROUGHS HTC NETEX	156.4	391.0	0.0

101	5512	550802	DELETED HTC PRESENTATION	450.0	0.0	0.0
102	55	550803	CIP, BURROUGHS HTC	450.0	22500.0	0.0
103	55	550901	BURROUGHS DLP NETEX	680.0	720.0	0.0
104	55	550902	DELETED DLP PRESENTATION	450.0	0.0	0.0
105	55	550903	CIP, BURROUGHS DLP	450.0	22500.0	0.0
106	55	551001	PE 3200 NETEX	680.0	725.0	0.0
107	55	551002	DELETED PE3200 PRESENTATN	450.0	0.0	0.0
108	55	551003	CIP, PERKIN-ELMER	450.0	22500.0	0.0
109	55	551101	IBM NETEX	800.0	850.0	0.0
110	55	551102	DELETED IBM PRESENTATION	450.0	0.0	0.0
111	55	551103	CIP, IBM MVS	450.0	22500.0	0.0
112	55	551201	UNIVAC 1100 NETEX	800.0	850.0	0.0
113	55	551202	DELETED UNIVAC 1100 PRESEN	450.0	0.0	0.0
114	55	551203	CIP, UNIVAC	450.0	22500.0	0.0
115	5520	551301	TANDEM NETEX	326.4	816.0	0.0
116	5521	551302	DELETED TANDEM PRESENTATION	450.0	0.0	0.0
117	55	551303	CCP, TANDEM	550.0	27500.0	0.0
118	55	551304	CEM, TANDEM	475.0	22500.0	0.0
119	5522	551401	DELETED DDN INTERFACE	24.4	500.0	0.0
120	5523	551402	DELETED DDN SVC INTERFACE	350.0	13000.0	0.0
121	55	551403	DDN INTERFACE SUBSYSTEM	750.0	32000.0	0.0
122	55	551500	NETWORK MGMNT FACILITY GRP	324.0	13200.0	0.0
123	55	551501	NMF BASE FACILITY	180.0	6000.0	0.0
124	55	551502	NMF PERFORMANCE MONITORING	75.0	3500.0	0.0
125	55	551503	NMF DIAGNOSTIC MONITORING	75.0	3500.0	0.0
126	55	551504	NMF ACCOUNTING APPLICATION	75.0	3500.0	0.0
127	6101	610102	EDIT (P/O 510101)	0.0	0.0	0.0
128	6102	610103	TGAL (P/O 510101)	0.0	0.0	0.0
129	6103	610201	FILE COMPARSION UTILITY	0.0	0.0	0.0
130	6201	621001	COBOL	85.4	500.0	50.0
131	62	622001	TAL(P/O 510101)	0.0	0.0	0.0
132	62	623001	BLOCK STRUCTURED LANGUAGE	61.0	170.0	50.0
133	62	624001	FORTRN-ANSI 78	73.2	500.0	50.0
134	62	626001	BINDER (P/O 510101)	0.0	0.0	0.0
135	62	627001	ENFORM (P/O 510101)	85.4	2000.0	0.0
136	62	627002	DDL (P/O 510101)	36.6	500.0	0.0
137	62	628001	BINDER (P/O 510101)	0.0	0.0	0.0
138	62	629001	FUP (P/O 510101)	0.0	0.0	0.0
139	62	629002	EDIT (P/O 510101)	0.0	0.0	0.0
140	63	630101	BINDER (P/O 510101)	0.0	0.0	0.0
141	63	630102	OSP (P/O 510101)	0.0	0.0	0.0
142	63	630103	ENCORE (P/O 510101)	0.0	0.0	0.0
143	63	630104	XREF (P/O 510101)	0.0	0.0	0.0
144	63	630105	LOADFILE (P/O 510101)	0.0	0.0	0.0
145	64	640101	XRAY (P/O 510101)	0.0	0.0	0.0
146	64	640301	ENABLE (P/O 510101)	67.1	1500.0	0.0
147	65	650101	RUNTIME MON SYS (P/O 5101010	0.0	0.0	0.0
148	66	660101	TANDEM DIAG SBSYS(P/O5101010	0.0	0.0	0.0
149	8601	860101	TRANSFER	122.0	2000.0	0.0
150	8602	860201	T-TEXT	0.0	0.0	0.0

151	67	670101	CNFIG MGT QURY & RPT 1 T/CH	0.0	95000.0	0.0
152	68	680101	SFTWRE CTL QRY & RPT 1 T/CH	0.0	9000.0	0.0
153	7101	710101	COMPUTER OPERATIONS MAN SET	0.0	427.00	0.0
154	7201	720101	SYSTEMS PROGRAMMER MAN SET	0.0	607.0	0.0
155	7301	730101	HARDWARE MANUAL SET	0.0	375.0	0.0
156	7401	740101	PROGRAMMERS REF MAN SET	0.0	437.0	0.0
157	XXXX	39XXXX	TRAINING GROUP I	0.0	268637.0	0.0
158	XXXX	39XXXX	TRAINING GROUP II	0.0	164271.0	0.0
159	XXXX	39XXXX	TRAINING GROUP III	0.0	89655.0	0.0
160	XXXX	39XXXX	TRAINING GROUP IV	0.0	21909.0	0.0
161	XXXX	XXXXXX	OPERATOR TRAINING	0.0	14109.0	0.0
162	XXXX	XXXXXX	HARDWARE OVERVIEW	0.0	7000.0	0.0
163	XXXX	XXXXXX	SYSTEMS RESOURCE MGT	0.0	20000.0	0.0
164	XXXX	XXXXXX	SYSTEMS TUNING AND XRAY	0.0	15000.0	0.0
165	XXXX	XXXXXX	DATA COMMUNICATIONS	0.0	10000.0	0.0
166	XXXX	XXXXXX	TAL	0.0	15000.0	0.0
167	XXXX	XXXXXX	SPLICENET MIGRATION WORKSHP	0.0	8000.0	0.0
168	81	810101	PM ON-CALL	0.0	0.0	0.0
169	81	810201	PRVT MAINT FOR PER/CALL SIT	0.0	0.0	0.0
170	82	820101	ON-CALL MAINTENANCE	0.0	0.0	0.0
171	83	830101	PER-CALL MAINTENANCE	0.0	0.0	0.0
172	84	840101	EMERGENCY PER-CALL MAINT	160.0	0.0	0.0
173	85	850101	NETWORK ADMN COMP(P/O5502010	0.0	0.0	0.0
174	89	890100	TPS SIMULATION (P/O 520101)	0.0	0.0	0.0
175	90	900101	TPS APPL. INT (P/O 520101)	0.0	0.0	0.0
176	91	910101	TPS NTWK INTFCOMP(P/O5201010	0.0	0.0	0.0
177	92	920101	DSTB TPS PROC CMP(P/O5201010	0.0	0.0	0.0
178	93	930101	INTGRTED DDL CMP(P/O 5201010	0.0	0.0	0.0
179	94	940101	TPS RECOVERY CMP(P/O 5201010	0.0	0.0	0.0
180	95	950101	ENVISION (P/O 510101)	0.0	0.0	0.0
181	96	960101	CONTRACTOR PERS SUP (P/PERS	6533.0	0.0	0.0
182	96	960201	SPLICENET MIGRATION SUPPORT	0.0	800.0	0.0
183	97	970101	CNFG MGT DATA & RP(MTH COST	0.0	4500.0	0.0
184	98	980101	CONTRACTOR TRAVEL COSTS	0.0	0.0	0.0
185	99	991001	PRE-INST TEST FAC.(SEE NOTE	0.0	0.0	0.0
186	99	992001	REMOTE BATCH TERML(SEE NOTE	0.0	0.0	0.0
187	99	993001	INTERACTIV TERM ACC SEE NOT	0.0	0.0	0.0
188	99	994001	HAND ON TEST FAC SEE NOTE	0.0	0.0	0.0

CONFIGURATION MANAGEMENT SYSTEM

BACHMAN DIAGRAM



dBASE III DATA BASE STRUCTURE DESCRIPTIONS

Structure for database : **CONFIG.DBF**
Date of last update : 12/21/85

Field	Field Name	Type	Width	Dec
1	SITENO	Character	2	
2	SITENAME	Character	50	
3	SITECO	Character	20	
4	SITENAMEFL	Character	40	
5	SITEADD1	Character	40	
6	SITEADD2	Character	40	
7	SITECITY	Character	40	
8	SITESTATE	Character	2	
9	SITEZIP	Character	10	
10	SITETYPE	Character	4	
11	MAINTOPT	Character	4	
12	MAINTRESP	Character	1	
** Total Record Width in Characters **			253	

Structure for database : **DESCRIP.DBF**
Date of last update : 12/08/85

Field	Field Name	Type	Width	Dec
1	FEATURENO	Character	6	
2	CLIN	Character	4	
3	DESCIPT	Character	30	
4	MODELNO	Character	10	
5	FDCMODEL	Character	15	
6	TYPECOMPON	Character	1	
7	BASEMAINT	Numeric	7	2
8	NOTES	Memo	10	
** Total Record Width in Characters **			83	

dBASE III DATA BASE STRUCTURE DESCRIPTIONS (Continued)

Structure for database : **EQUIP.DBF**
Date of last update : 01/08/86

Field	Field Name	Type	Width	Dec
1	EFFDATE	Character	6	
2	SITENO	Character	2	
3	FEATURENO	Character	6	
4	UNIT_PRICE	Numeric	11	2
5	MO_MAINT	Numeric	11	2
6	UNIT_INSTA	Numeric	8	2
7	QTY	Numeric	3	

** Total Record Width in Characters ** 47

Structure for database : **MANUAL.DBF**
Date of last update : 01/11/86

Field	Field Name	Type	Width	Dec
1	SITENO	Character	2	
2	FEATURENO	Character	6	
3	MANLDESC	Character	24	

** Total Record Width in Characters ** 32

Structure for database : **SERIALNO.DBF**
Date of last update : 01/08/86

Field	Field Name	Type	Width	Dec
1	EFFDATE	Character	6	
2	SITENO	Character	2	
3	FEATURENO	Character	6	
4	QTY	Numeric	3	
5	TOTQTY	Numeric	3	
6	SERIALNO	Character	8	

** Total Record Width in Characters ** 28

dBASE III DATA BASE STRUCTURE DESCRIPTIONS (Continued)

Structure for database : **TED.DBF**
Date of last update : 07/18/85

Field	Field Name	Type	Width	Dec
1	FILLER1	Character	1	
2	SITENO	Character	2	
3	CLIN	Character	4	
4	FILLER2	Character	4	
5	FEATURENO	Character	6	
6	FILLER3	Character	6	
7	DESCIPT	Character	24	
8	FILLER4	Character	1	
9	QTY	Numeric	3	
10	FILLER5	Character	1	
11	UNIT_PRICE	Numeric	11	2
12	FILLER6	Character	1	
13	TOT_PRICE	Numeric	11	2
14	FILLER7	Character	1	
15	MO_MAINT	Numeric	11	2
16	FILLER8	Character	1	
17	MAINT_FAC	Numeric	6	3
18	FILLER9	Character	1	
19	MAINT_MOS	Numeric	6	
20	FILLER10	Character	1	
21	TOT_MAINT	Numeric	10	2
22	FILLER11	Character	1	
23	UNIT_INSTA	Numeric	8	2
24	FILLER12	Character	1	
25	TOT_INSTAL	Numeric	10	2
26	FILLER13	Character	1	
27	COMP_DT_CR	Numeric	11	2
28	FILLER14	Character	1	
29	SYS_DT_CR	Numeric	11	2

** Total Record Width in Characters ** 156

dBASE III Configuration Management System

INDICES COMPOSITION

DATA BASE FILE NAME	INDEX NAME	INDEX KEY COMPOSITION
CONFIG.DBF	CONFIG.NDX	SITENO
DESCRIP.DBF	DESCRIP.NDX	FEATURENO
EQUIP.DBF	EQUIPSIT.NDX	SITENO
	EFEAT.NDX	FEATURENO
	EQUIPSD.NDX	SITENO + EFFDATE
	EQUIPDAT.NDX	SITENO + FEATURENO
	EQUIPPRJ.NDX	EFFDATE + SITENO + FEATURENO
MANUAL.DBF	MANULSIT.NDX	SITENO + FEATURENO
SERIALNO.DBF	SERNOSIT.NDX	SITENO
	SERNODAT.NDX	SITENO + EFFDATE
	SERNOFEA.NDX	SITENO + FEATURENO
	SERNOPRJ.NDX	EFFDATE + SITENO + FEATURENO

dBASE III Configuration Management System

PROGRAM INVOCATION SEQUENCES

DATA LOAD	EQUIPMENT FILE MAINTENANCE	DESCRIPTION FILE MAINTENANCE
SELECTOR.PRG	SELECTOR.PRG	SELECTOR.PRG
MAINMENU.PRG	MAINMENU.PRG	MAINMENU.PRG
NEWDOCMD.PRG	EQUIPCMD.PRG	DESPMOD.PRG
NEWDOCVT.PRG	EQUIPUPD.PRG	DESPPUPD.PRG
NEWDOADD.PRG	EQUIPREV.PRG	DESPPREV.PRG
SERNOBLD.PRG		

CONFIGURATION FILE MAINTENANCE	MANUAL FILE MAINTENANCE	SERIAL NUMBER FILE MAINTENANCE
SELECTOR.PRG	SELECTOR.PRG	SELECTOR.PRG
MAINMENU.PRG	MAINMENU.PRG	MAINMENU.PRG
CONFMOD.PRG	MANULCMD.PRG	SERNOCMD.PRG
CONFUPD.PRG	MANULADD.PRG	SERNOUPD.PRG
CONFREV.PRG	MANULUPD.PRG	SERNOREV.PRG
	MANULDEL.PRG	
	MANULREV.PRG	

PROJECT LEVEL REPORTS	SITE LEVEL REPORTS	EFFECTIVE DATE LEVEL REPORTS
SELECTOR.PRG	SELECTOR.PRG	SELECTOR.PRG
MAINMENU.PRG	MAINMENU.PRG	MAINMENU.PRG
REPORCMD.PRG	REPORCMD.PRG	REPORCMD.PRG
PROJRPTS.PRG	SITERPTS.PRG	DATERPTS.PRG
EQPPJRPT.PRG	EQPSTRPT.PRG	EQPDTPRC.PRG
SNOPJRPT.PRG	MNLSTRPT.PRG	EQPDTNPC.PRG
	SNOSTRPT.PRG	SNODTRPT.PRG

MAINTENANCE DELIVERY ORDER	LABEL GENERATION
SELECTOR.PRG	SELECTOR.PRG
MAINMENU.PRG	MAINMENU.PRG
MAINTDO.PRG	MKLABELS.PRG

Page 1 SPLICE.PAS Program Listing

```
1  Program SPLICE_CONFIGURER (Textin, Input, Output);
2
3  { ********************************************************************* }
4  {  Title    : SPLICE_Configurer                                        }
5  {  Authors  : LCDR Robert L. Beard, III, SC, USN                       }
6  {             LCDR Winston H. Buckley, SC, USN                         }
7  {             LCDR Edward J. Case, SC, USN                             }
8  {  Purpose  : To be used by Naval Supply Systems Command, SUP 0473,    }
9  {             personnel as the principal means to configure new Stock  }
10 {             Point Logistic Integrated Communications Environment     }
11 {             (SPLICE) sites.  In later versions additions will be     }
12 {             made to assist in preparing augmentations to existing    }
13 {             sites, as well as prepare annual renewal delivery orders }
14 {             for existing sites                                       }
15 {                                                                      }
16 {  Developed: 04 October 1985                                         }
17 {  Updated  : 07 December 1985                                        }
18 { ********************************************************************* }
19
20 { ********************************************************************* }
21 {  General Comments:  This program is being designed as an "expert"     }
22 {  system.  It will use a series of "rules of thumb" to develop and    }
23 {  maintain SPLICE configurations at 62 sites throughout the world.    }
24 {  The SPLICE configurations developed to date have been done by hand  }
25 {  and have required extensive "hand message" by technical, financial, }
26 {  and contractor personnel to ensure their accuracy.  This has proven }
27 {  to be both costly in terms of dollars and manpower.  By prompting   }
28 {  the user for key information, this "expert system" will develop     }
29 {  technically accurate configurations, cost them out, and prepare the }
30 {  final delivery orders.                                              }
31 { ********************************************************************* }
32
33 {  The following constants, type and variable declarations are used by the
34    Software Bottling Company of New York screen generation program "SCREEN
35    SCULPTOR".                                                          }
36
37
38 Type
39       STR2 = STRING[2]; STR80 = STRING[80]; STR79 = STRING[79];
40       resSS = (staySS, prevSS, exitSS, nextSS);
41
42 Const CopyrightSS='(C)Copyright 1984, The Software Bottling Company Of New York';
43 {     DO NOT REMOVE The Above Copyright Notice
44       This Program may not be used without the above Copyright Notice     }
45
46 Const
47       { Esc,  Up Arrow Key,  Left Arrow Key ,  Page Up Key  }
48       escSS=#27;        uSS='H';         lSS='K';         puSS='I';
49       { Blank,  Down Arrow Key,  Right Arrow Key,  Page Down Key }
50       blankSS=' ';      dSS='P';         rSS='M';         pdSS='Q';
```

```
51        { Function keys  F1-F10 }
52        f1SS=';';        f2SS='<';       f3SS='=';       f4SS='>';      f5SS='?';
53        f6SS='@';        f7SS='A';       f8SS='B';       f9SS='C';      f10SS='D';
54        retSS : STR2='';
55
56
57    Var
58       answerSS : String [1];
59       rangeSS : STR80;
60       BeepOnSS, last_fieldSS, retrieveSS : BOOLEAN;
61       actionSS, last_field_actionSS : resSS;
62       hiSS, loSS : REAL;
63       vtypeSS, screenSS, screen_fieldSS, varSS : INTEGER;
64
65
66    {  The following constants, type and variable declariations are used by the
67       SPLICE configurer.                                                      }
68
69    Type
70       Op_Mode  = (Hard, Soft, Document, Train, Maint, Other);
71                                          { Defines major components categories  }
72       Title    = String [19];
73       Names    = Array [1..12] of String [9];
74       CostType = Record                  { Record for cost data array }
75           featureno : String [6];        { contract feature number }
76           clin      : String [6];        { contract line item number }
77           descript  : String [27];       { contract item description }
78           momaint   : Real;              { monthly maintenance w/ escalation  }
79           purchprice: Real;              { purchase price w/ discounts  }
80           instcost  : Real;              { installation cost w/ escalation  }
81           basemaint : Real;              { basic monthly maintenance cost }
82       End;    {  Record CostType  }
83
84
85       SiteType = Record                  { Record for site specific information }
86           siteno         : Integer;      { Site number }
87           sitename       : String [27];  { Site name }
88           documentation  : Integer;      { Documentation class required }
89           training       : Integer;      { Training class required }
90           maint_options  : String [4];   { Currently not used }
91           maint_response : String [1];   { Currently not used }
92           site_type      : String [1];   { Type=MAPS site [M] or Stock Point [S] }
93           site_inst_cost : Real;         { Site installation cost w/o escallation}
94       End;    {  Record SiteType  }
95
96
97    Const
98       File1 = 'Costs.IN';                { Name of cost data file }
99       File2 = 'Config.SIT';              { Name of site configuration file }
100      File3 = 'Splice.SCR';              { Name of screen image file }
```

```
101|    Month_Name : Names = ('January  ', 'February ', 'March    ', 'April    ',
102|                           'May      ', 'June     ', 'July     ', 'August   ',
103|                           'September', 'October  ', 'November ', 'December ');
104|
105|
106| Var
107|    Mode      : Op_Mode;                 { Subscript for Totals }
108|    SiteInfo  : SiteType;                { Record containing site specific info }
109|    Subtotals : Array [0..5] of Array [1..3] of Real;
110|                                         { Three subtotals for each section }
111|    Totals    : Array [0..5] of Array [1..2] of Real;
112|                                         { OPN & OMN Totals for each section }
113|    CostTable : Array [1..200] of CostType;
114|                                         { Array of updated COSTS.IN file info }
115|    CardRdr, LIU, Processors, THYPERchannels                  : Integer;
116|    Maint_Months, NETEX_Months, DDN_SW_Months                 : Integer;
117|    A140, A150, A220, A400, A510, AXXX, I, Quantity           : Integer;
118|    System_Downtime_Component, Downtime_Credit, Maint_Factor : Real;
119|    Emerg_Maint_Rate, Extended_Price, Momaint_Esc_Rate        : Real;
120|    Stock_Point     : Char;        { Variables for character responses }
121|    Screenfile      : File;        { File of Screen Images }
122|    Site_Preps      : String [1];  { Yes or No user response variable }
123|    Day             : String [2];  { Effective Day of Delivery Order }
124|    Year            : String [4];  { Effective Year of Delivery Order }
125|    Line_Number     : String [6];  { Contract Line Item Number }
126|    Month           : String [9];  { Effective Month of Delivery Order }
127|    PRN_File_Name   : String [12]; { Output LOTUS .PRN file }
128|    Diskfile        : Text;        { Output Delivery Order File }
129|
130| {$V-,C-,R-} { Pascal Directives used by SCREEN SCULPTOR. See Compiler Manual }
131| {$I SPLICE1.PAS  Include Procedures In This File by SCREEN SCULPTOR.  }
132I {  SCREEN SCULPTOR(C)
133I    (C) COPYRIGHT, THE SOFTWARE BOTTLING COMPANY OF NEW YORK, 1984, 1985
134I ** Turbo Pascal Version, Trade Mark Of Borland International }
135I
136I TYPE
137I      RECPACKSS = record
138I                  AX, BX, CX, DX, BP, SI, DI, DS, ES, Flags: INTEGER;
139I                  end;
140I
141I VAR  regsSS : RECPACKSS;
142I
143I
144I TYPE
145I       video_pointerSS = array[1..3840] of CHAR;
146I
147I VAR
148I { Video Variables  Set By SET_VIDEO_TYPE procedure }
149I       vcolorSS, voffSS, vonSS: byte;
150I       vdispSS: INTEGER;
```

```
151I       videoSS: ^video_pointerSS;
152I
153I PROCEDURE BEEP(BeepOn: BOOLEAN);
154I BEGIN
155I   if BeepOn then write(chr(7));
156I END;
157I
158I
159I PROCEDURE COLOR(foregr,backgr: BYTE);
160I { Select current color by setting Foreground and Background
161I   Any values between 0 and 15 are acceptable. See Tech Ref Manual
162I }
163I   BEGIN
164I     if backgr>7 then foregr:=foregr+16;
165I     TextColor(foregr);
166I     TextBackground(backgr);
167I   END; { COLOR }
168I
169I
170I PROCEDURE WRITEC(vtext: STR80);
171I   BEGIN
172I     write(vtext);
173I   END; { WRITEC }
174I
175I
176I PROCEDURE CLEAR_KBD;
177I { Clear Type Ahead Characters From Keyboard }
178I VAR kchar: CHAR;
179I BEGIN
180I   while keypressed do read(kbd,kchar);
181I END; { CLEAR_KBD }
182I
183I
184I FUNCTION  SET_MONITOR_TYPE: INTEGER;
185I { Determine The Type Of Monitor Being Used }
186I VAR j : INTEGER;
187I
188I   PROCEDURE CURSOR_SET;
189I   { Set Cursor Size }
190I   VAR v1,v2,v3 : INTEGER;
191I   BEGIN
192I   if j=2 then
193I       begin
194I           v1:=$3d4;
195I           v2:=$3d5;
196I           v3:=$3d9
197I       end
198I   else
199I       begin
200I           v1:=$3b4;
```

```
201I           v2:=$3b5;
202I           v3:=$3b9
203I         end;
204I    if (j=2) or (j=3) then
205I    begin
206I      port[v1]:=$0A; port[v2]:=0; { Set High Cursor Scan Line }
207I      port[v1]:=$0B; port[v2]:=7; { Set Low Cursor Scan Line }
208I      port[v3]:=1;                { Set Border Color to BLUE }
209I    end;
210I    END; { CURSOR_SET }
211I
212I BEGIN
213I    j:=mem[$40:$10]; { Figure out the monitor type }
214I    j:=(j and $0030) DIV 16;
215I    CASE j OF
216I      0: begin writeln('Illegal Monitor Mode'); halt end;
217I      1: begin { Set 40 column color to 80 column color }
218I           writeln('Use MODE command to set to 80. ( MODE CO80 )'); halt
219I         end;
220I      2: videoSS:=ptr($b800,0);  { Graphics 80 }
221I      3: videoSS:=ptr($b000,0);  { Monochrome }
222I    END;
223I    voffSS:=$1; vonSS:=$29; vdispSS:=$3d8;  { Video Off, On, Location }
224I    CURSOR_SET; { Set To A Large Cursor }
225I    COLOR(14,1); { Set Default Color }
226I    SET_MONITOR_TYPE:=j;
227I END; { SET_MONITOR_TYPE }
228I
229I
230I PROCEDURE DISPLAY_SCREEN (var screenfile : FILE);
231I { Load Screen From Disk. Display To Monitor }
232I VAR bload: array[1..3968] of CHAR;
233I     exist : Boolean;
234I
235I     PROCEDURE VIDEO_OFF; { Turn Video Off }
236I       BEGIN port[vdispSS]:=voffSS; END;
237I
238I     PROCEDURE VIDEO_ON; { Turn Video On }
239I       BEGIN port[vdispSS]:=vonSS; END;
240I BEGIN
241I    if IOresult=0 then
242I       begin
243I           exist:=TRUE;
244I           blockread (screenfile, bload[1], 31);
245I           VIDEO_OFF;
246I           move (bload[8], videoSS^, 3840);
247I           VIDEO_ON;
248I       end
249I    else exist:=FALSE;
250I    if not exist then
```

```
251I       begin
252I           color (15, 4);
253I           gotoxy (25, 13);
254I           write (^G, 'Part of SPLICE.SCR is missing.');
255I       end;
256I   retSS := '';
257I END; { DISPLAY_SCREEN }
258I
259I { See SCREEN SCULPTOR Manual For A Description Of GETITEM }
260I PROCEDURE GETITEM(
261I                    COL,LIN,LEN :          BYTE;
262I                    ITYPE :                CHAR;
263I                VAR WITEM :                STR80;
264I                    PICT :                 STR80;
265I                    ITEM_LOW,ITEM_HIGH :   STR80;
266I                VAR RET :                  STR2;
267I                    RETRIEVE :             BOOLEAN;
268I                    FGR_COLOR,BGR_COLOR :  BYTE
269I                    );
270I
271I TYPE
272I   PICT_TYPE = set of CHAR;
273I
274I CONST
275I   confirm=FALSE; { If FALSE auto-skip to next field when field is filled }
276I   l='K'; r='M'; u='H'; d='P'; dl='S'; ins='R'; pu='I'; pd='Q';
277I       { Define The Function Keys }
278I   f1=';'; f2='<'; f3='='; f4='>'; f5='?';
279I   f6='@'; f7='A'; f8='B'; f9='C'; f10='D';
280I   special_keys: PICT_TYPE = [l,r,u,d,dl,ins,pu,pd];
281I   pict_elements: PICT_TYPE = ['X','U','L','#','9','8'];
282I   bk: BYTE=8; esc: BYTE=27; cr: BYTE=13;
283I
284I VAR
285I   hcol,pcol,tcol,pict_dec,item_dec,tempb1,tempb2,plen,ilen: BYTE;
286I   kchar: str2; range_check,clear25: BOOLEAN;
287I   check,end_of_field,begin_of_field,sign_flag,
288I   special,dec_flag,valid_char: BOOLEAN;
289I   temp_item, item: STR80;
290I   fchar: CHAR;
291I
292I FUNCTION DATE_CHECK(datevar: STR80): BOOLEAN;
293I { Checks For Date Validity Excluding  the following:
294I   Does not check Leap Years. If datevar is correct then DATE_CHECK is TRUE }
295I CONST
296I     month_days: array[1..12] of INTEGER=(31,28,31,30,31,30,31,31,30,31,30,31);
297I VAR mm,dd,yy: STR2;
298I     mmi,ddi,yyi: INTEGER;
299I     error: INTEGER;
300I     ch_date: BOOLEAN;
```

```
301I BEGIN
302I if ord(datevar[0])<>8 then
303I   DATE_CHECK:=FALSE
304I else
305I begin
306I   ch_date:=TRUE;
307I   mm:=copy(datevar,1,2);
308I   dd:=copy(datevar,4,2);
309I   yy:=copy(datevar,7,2);
310I   val(mm,mmi,error);
311I   if (error<>0) or (mmi<1) or (mmi>12) then ch_date:=FALSE;
312I   if ch_date then
313I   begin
314I     val(dd,ddi,error);
315I     if (error<>0) or (ddi<1) or (ddi>month_days[mmi]) then ch_date:=FALSE;
316I   end;
317I   if ch_date then
318I   begin
319I     val(yy,yyi,error);
320I     if error<>0 then ch_date:=FALSE;
321I   end;
322I   DATE_CHECK:=ch_date;
323I end;
324I END; { PROCEDURE DATE_CHECK }
325I
326I FUNCTION CHECK_DATE(DATE, DATE_LOW, DATE_HIGH: STR80): BOOLEAN;
327I { Check Validity If Date and whether it falls between low and high }
328I { If low range date is higer than high range date then we assume }
329I { we crossed centuries eg. 09/09/84 to 01/01/10 }
330I { Also a null date is ignored }
331I CONST dnull = '  /  /  ';
332I VAR   ch_date: BOOLEAN;
333I BEGIN
334I if date<>dnull then ch_date:=DATE_CHECK(date) else ch_date:=TRUE;
335I if ch_date and (date<>dnull) and (date_low<>dnull) and (date_high<>dnull) then
336I begin
337I   if ch_date then ch_date:=DATE_CHECK(date_low);
338I   if ch_date then ch_date:=DATE_CHECK(date_high);
339I   if ch_date then
340I   begin
341I     date:=copy(date,7,2)+copy(date,1,6);
342I     date_low:=copy(date_low,7,2)+copy(date_low,1,6);
343I     date_high:=copy(date_high,7,2)+copy(date_high,1,6);
344I     if (date_low<=date_high) then              { Low Date < High Date }
345I     begin
346I        if (date<date_low) or (date>date_high) then ch_date:=FALSE
347I     end else                                  { Low Date  > High Date }
348I        if (date<date_low) and (date>date_high) then ch_date:=FALSE;
349I   end;
350I end;
```

```
351I if ch_date then CHECK_DATE:=TRUE else begin CHECK_DATE:=FALSE; end;
352I END; {PROCEDURE CHECK_DATE}
353I
354I FUNCTION CHECK_RANGE(VAR item, item_low, item_high: STR80): BOOLEAN;
355I { Check to see whether item is within and including low and high }
356I VAR itemr, lowr, highr: REAL;
357I     errori, errorl, errorh: INTEGER;
358I BEGIN
359I CHECK_RANGE:=TRUE;
360I val(item_low,lowr,errorl);
361I val(item_high,highr,errorh);
362I val(item,itemr,errori);
363I if (errorl=0) and (errorh=0) and (errori=0) then
364I begin
365I   if itemr<lowr then CHECK_RANGE:=FALSE
366I   else if itemr>highr then CHECK_RANGE:=FALSE;
367I end else
368I   CHECK_RANGE:=FALSE;
369I END; { PROCEDURE CHECK_RANGE }
370I
371I PROCEDURE MESSAGE(mess_num: BYTE);
372I { Displays A Message On Line 25 and sets global clear25 to TRUE }
373I VAR mess, temp_item: STR79; mess_length, start_col: INTEGER;
374I BEGIN
375I   color (14,1); gotoxy (1, 25); clreol;
376I   case mess_num of
377I   1: mess:=' Only 0 thru 9 Allowed ';
378I   2: mess:=' Only 0 thru 9 or a space Allowed ';
379I   3: mess:=' BAD Date OR Not Within '+item_low+' & '+
380I              item_high+'. Use [Del] To Blank Out Digits. ';
381I   4: mess:=' Number Not Within '+item_low+' & '+item_high+' Range ';
382I   5: mess:=' Only 0 thru 9, decimal point OR - sign Allowed ';
383I   6: mess:=' Only Y or N Allowed ';
384I   7: mess:=' Only M or F Allowed ';
385I   8: mess:=' No More Room For Digits. Use [Del] key to remove ';
386I   9: mess:=' No Space For Negative Numbers. Input Positions Must Be Larger ';
387I   end; { case }
388I mess_length:=ord(mess[0]);
389I start_col:=(79-mess_length) DIV 2;
390I clear25:=TRUE;
391I gotoxy(start_col,25);
392I COLOR(15, 4);
393I write(^G, mess);
394I gotoxy(hcol,lin);
395I COLOR (14, 1);
396I CLEAR_KBD;
397I END; {MESSAGE PROCEDURE}
398I
399I FUNCTION  GETCHAR(ctype: CHAR; VAR kchar: STR2):BOOLEAN;
400I { if GETCHAR=TRUE on return then kchar= (l r d u dl in pu pd esc cr bk)}
```

```
401I { if GETCHAR=FALSE on return then kchar is alpha numeric chars }
402I { ctype must be one of the following}
403I { U=Uppercase, L=Lower Case, X=Any Char, 9=0..9,' ', #=0..9,-,+,. }
404I { GETCHAR will filter out any control characters }
405I TYPE  PICT_TYPE = set of CHAR;
406I CONST esc = 27; cr = 13; bk = 8;
407I       l='K'; r='M'; u='H'; d='P'; dl='S'; ins='R'; pu='I'; pd='Q';
408I       f1=';';f2='<'; f3='='; f4='>'; f5='?';
409I       f6='@'; f7='A'; f8='B'; f9='C'; f10='D';
410I       special_keys: PICT_TYPE = [l,r,u,d,dl,ins,pu,pd];
411I       func_keys: PICT_TYPE = [f1,f2,f3,f4,f5,f6,f7,f8,f9,f10];
412I var   str: CHAR; special,correct: BOOLEAN;
413I       temps: STR79;
414I BEGIN
415I   kchar:='';
416I   GETCHAR:=TRUE; correct:=FALSE;
417I   repeat { until getchar = TRUE }
418I   special:=TRUE;
419I   repeat { until a valid picture character }
420I   repeat until keypressed;
421I   read(kbd,kchar[1]);
422I   if keypressed and (kchar[1]=chr(esc)) then
423I   begin
424I     read(kbd,kchar[2]);
425I     kchar[1]:=chr(0);
426I     kchar[0]:=chr(2);
427I   end else
428I     kchar[0]:=chr(1);
429I { Clear Line 25 }
430I   if clear25 then
431I   begin
432I     color (14, 1);
433I     gotoxy (1,25);
434I     clreol;
435I     gotoxy(hcol,lin);
436I     clear25:=FALSE;
437I     color (FGR_COLOR, BGR_COLOR);
438I   end;{ Clear Line }
439I   if (not (ord(kchar[1]) in [esc,cr,bk])) and (ord(kchar[0])=1) then
440I   begin
441I   str:=kchar[1];
442I   if (str>=' ') and (str<='~') then
443I   case ctype of
444I     'X': correct:=TRUE;
445I     'U': begin
446I          if str in ['a'..'z'] then str:=chr(ord(str) and $df);
447I          kchar[1]:=str; correct:=TRUE;
448I          end;
449I     'L': begin
450I          if str in ['A'..'Z'] then  str:=chr(ord(str) or $20);
```

```
451I          kchar[1]:=str; correct:=TRUE;
452I          end;
453I      '#': if  (str in ['0'..'9','-','.']) then correct:=TRUE else message(5);
454I      '9': if str in ['0'..'9',' '] then correct:=TRUE else message(2);
455I      '8': if str in ['0'..'9'] then correct:=TRUE else message(1);
456I    end { case  }
457I    end { begin }
458I    else
459I      begin {special character}
460I        GETCHAR:= FALSE;
461I        correct:=TRUE;
462I        str:=kchar[1];
463I      end;
464I    until correct;
465I    if (ord(kchar[0])=2) then  { see if it is a special character }
466I    begin
467I      special:=FALSE;
468I      GETCHAR:=TRUE;
469I      if (kchar[2] in special_keys) or (kchar[2] in func_keys) then
470I      begin
471I        GETCHAR:=FALSE;
472I        special:=TRUE;
473I      end else BEEP(BeepOnSS);
474I    end;
475I    until special;
476I    ret:=kchar;
477I END; { GETCHAR FUNCTION }
478I
479I PROCEDURE DECH; { Positions Cursor At the Next Non Edit Character }
480I VAR elem_end: BOOLEAN; tempb1: BYTE;
481I BEGIN
482I if hcol<>(col+tcol-1) then
483I begin
484I   tempb1:=pcol;
485I   elem_end:=FALSE;
486I   repeat
487I     tempb1:=tempb1-1;
488I     if (pict[tempb1] in pict_elements) or (tempb1<1) then elem_end:=TRUE;
489I   until elem_end;
490I   if tempb1>=1 then
491I       begin
492I           hcol:=hcol-(pcol-tempb1);
493I           pcol:=tempb1;
494I       end;
495I end else
496I begin_of_field:=TRUE;
497I END; { DECH PROCEDURE }
498I
499I PROCEDURE INCH; { Positions Cursor At the Next Non Edit Character }
500I VAR elem_end: BOOLEAN; tempb1: BYTE;
```

```
501I BEGIN
502I if hcol<>(col+len-1) then
503I begin
504I   tempb1:=1;
505I   elem_end:=FALSE;
506I   repeat
507I     tempb1:=tempb1+1;
508I     if (pict[pcol+tempb1-1] in pict_elements) or ((pcol+tempb1)>(len)) then
509I         elem_end:=TRUE;
510I   until elem_end;
511I   if tempb1<=(len) then
512I       begin
513I           hcol:=hcol+tempb1-1;
514I           pcol:=pcol+tempb1-1;
515I       end;
516I end else
517I end_of_field:=TRUE;
518I END; { INCH PROCEDURE }
519I
520I PROCEDURE STRIP_BLANKS(VAR temp_item: STR80);
521I { Strip Blanks On Both Sides Of passed item }
522I VAR i,j: BYTE;
523I BEGIN
524I if temp_item<>'' then
525I begin
526I   j:=ord(temp_item[0]);
527I   { Strip Leading Blanks }
528I   i:=0;
529I   while (temp_item[i+1]=' ') and (i<j) do i:=i+1;
530I   if (i>0) and (i<j) then temp_item:=copy(temp_item,i+1,j-i)
531I   else if (i=j) and (temp_item[j]=' ') then temp_item:='';
532I   i:=pos(' ',temp_item);          { strip trailing blanks }
533I   if i<>0 then temp_item:=copy(temp_item,1,i-1);
534I end;
535I END; { STRIP_BLANKS PROCEDURE }
536I
537I BEGIN { Main Procedure Of GETITEM }
538I item:=witem;   { Store Actual Item In A Work Variable }
539I clear25:=FALSE;
540I if itype='D' then
541I     begin
542I         pict:='88/88/88';
543I         len:=8;
544I     end;
545I if itype='Y' then
546I begin
547I   if not (item[1] in ['Y','N']) then item:='Y';
548I   pict:='U';
549I   len:=1;
550I end;
```

```
551I if itype='M' then
552I begin
553I   if not (item[1] in ['M','F']) then item:='M';
554I   pict:='U';
555I   len:=1;
556I end;
557I end_of_field:=FALSE;
558I begin_of_field:=FALSE;
559I if (pict='') and (itype='C') then pict:='X';
560I plen:=ord(pict[0]);
561I fchar:=pict[plen];
562I ilen:=ord(item[0]);
563I {* Fill Item with blanks  *}
564I if itype<>'N'  then {* If item is non numeric *}
565I begin
566I   while ilen<len do
567I       begin
568I           item:=item+' ';
569I           ilen:=ilen+1;
570I       end;
571I   while plen<len do
572I       begin
573I           pict:=pict+fchar;
574I           plen:=plen+1;
575I       end;
576I end else {* If item is numeric *}
577I begin
578I   strip_blanks(item);
579I   if item='' then item:='0';
580I   ilen:=ord(item[0]);
581I   while ilen<len do
582I       begin
583I           item:=' '+item;
584I           ilen:=ilen+1;
585I       end;
586I   while plen<len do
587I       begin
588I           pict:='#'+pict;
589I           plen:=plen+1;
590I       end;
591I   if ord(pict[0])>len then pict:=copy(pict,ord(pict[0])-len+1,len);
592I   if ord(item[0])>len then item:=copy(item,1,len);
593I   ilen:=ord(item[0]); plen:=ord(pict[0]);
594I   pict_dec:=pos('.',pict);
595I   item_dec:=pos('.',item);
596I { Align Decimal Positions If Necessary }
597I if pict_dec<>item_dec then
598I begin { alignement }
599I check:=TRUE;
600I { If picture has no decimal point and item does}
```

```
601I if (pict_dec=0) and cneck then
602I begin
603I   item:=copy(item,1,item_dec-1);
604I   fillchar(temp_item,ord(pict[0])-ord(item[0]),' ');
605I   item:=temp_item+item;
606I   check:=FALSE;
607I end;
608I { If item has no decimal point and pict does}
609I if (item_dec=0) and check then
610I begin
611I   strip_blanks(item);
612I   tempb2:=plen-pict_dec; { # of decimal points };
613I   fillchar(temp_item,tempb2,item[ord(item[0])]);
614I   item:=item+'.'+temp_item; { Add decimal trailing digits }
615I   ilen:=ord(item[0]); { Get length of item }
616I   while ilen<plen do  { Add blanks left}
617I       begin
618I           item:=' '+item;
619I           ilen:=ilen+1;
620I       end;
621I   if ilen>plen then { If The Item > Picture }
622I   begin
623I     item:=copy(item,1,pict_dec-1);
624I     item:=item+'.'+temp_item;
625I   end;
626I   check:=FALSE;
627I end;
628I { If item decimal is further right than pict dec}
629I if (item_dec>pict_dec) and check then
630I begin { Move the item to the left dropping off numbers  picts}
631I   plen:=ord(pict[0]);
632I   ilen:=ord(item[0]);
633I   item:=copy(item,item_dec-pict_dec+1,ilen-(item_dec-pict_dec));
634I   ilen:=ord(item[0]);
635I   tempb1:=plen-ord(item[0]);
636I   fillchar(temp_item,tempb1,item[ilen]);
637I   item:=item+temp_item;
638I   ilen:=ord(item[0]);
639I   while ilen<plen do   { Add blanks left}
640I       begin
641I           item:=' '+item;
642I           ilen:=ilen+1;
643I       end;
644I   check:=FALSE;
645I end;
646I { If pict decimal is further right than item's}
647I if (pict_dec>item_dec) and check then
648I begin
649I   tempb2:=plen-pict_dec;
650I   item:=copy(item,1,item_dec+tempb2);
```

```
651I   ilen:=ord(item[0]);
652I   while ilen<len do
653I       begin
654I           item:=' '+item;
655I           ilen:=ilen+1;
656I       end;
657I   check:=FALSE;
658I end;
659I end { alignement };
660I end { fillings};
661I {* Copy edit characters to item *}
662I   for tempb1:=1 to len do
663I     if not (pict[tempb1] in pict_elements) then item[tempb1]:=pict[tempb1];
664I {* Display The item on the screen *}
665I   color(FGR_COLOR, BGR_COLOR);
666I   gotoxy(col,lin);
667I   writec(item);
668I {* Get Data From Screen If Retrieve is True}
669I if retrieve then
670I begin { Retrieve }
671I {* Move cursor to first position by bypassing edit chars }
672I   pcol:=1;
673I   while (not (pict[pcol] in pict_elements)) and (pcol<=len) do  pcol:=pcol+1;
674I {* Readjust column }
675I   tcol:=pcol;
676I {* Handle Non Numeric Type Of Item *}
677I if (itype<>'N'} and (pcol<=len) then
678I { pcol is position of cursor within field}
679I begin {* Non Numeric Field *}
680I   repeat { Until range_check = TRUE }
681I   pcol:=tcol;
682I   hcol:=col+pcol-1;
683I   gotoxy(hcol,lin}; {* Go to location on screen*}
684I   repeat
685I     end_of_field:=FALSE;
686I     begin_of_field:=FALSE;
687I     special:=FALSE;
688I     if getchar(pict[pcol],kchar) then
689I     begin
690I       writec(kchar);
691I       item[pcol]:=kchar[1];
692I       inch;
693I       gotoxy(hcol,lin);
694I     end else
695I     special:=TRUE;
696I     if special then
697I     begin { Special Key Pressed }
698I       ret:=kchar;
699I       special:=FALSE;
700I       if kchar[1]=chr(bk) then { It is backspace }
```

```
701I       begin
702I         dech;
703I         gotoxy(hcol,lin);  {Left}
704I       end else
705I       if (ord(kchar[0])=2) and (kchar[2] in [l,r,dl,ins]) then
706I       begin
707I         case kchar[2] of
708I        l: begin dech; gotoxy(hcol,lin); end; {Left}
709I        r: begin inch; gotoxy(hcol,lin); end; {Right}
710I       dl: begin {Delete}
711I             tempb2:=pcol+1; {FInd where the next edit char starts}
712I             while (pict[tempb2] in pict_elements) and (tempb2<=len) do
713I             { tempb1=start, tempb2:=end}
714I             tempb2:=tempb2+1;
715I             tempb2:=tempb2-1;
716I             for tempb1:=pcol to tempb2-1 do {move chars left}
717I                 begin { & put blank at end}
718I                     item[tempb1]:=item[tempb1+1];
719I                 end;
720I             item[tempb2]:=' ';
721I             {rewrite the item}
722I             gotoxy(col,lin);
723I             writec(item);
724I             gotoxy(hcol,lin);
725I           end;
726I      ins: begin {Insert}
727I             tempb2:=pcol+1;
728I             while (pict[tempb2] in pict_elements) and (tempb2<=len) do
729I                    tempb2:=tempb2+1;
730I             tempb2:=tempb2-1;
731I             for tempb1:=tempb2 downto pcol+1 do
732I                 begin
733I                     item[tempb1]:=item[tempb1-1];
734I                 end;
735I             item[pcol]:=' ';
736I             gotoxy(col,lin);
737I             writec(item);
738I             gotoxy(hcol,lin);
739I           end;
740I           end { Case kchar };
741I         end
742I         else {esc,cr,pgup,pgdn,up,dn}
743I         special:=TRUE;
744I       end {If backspace };
745I       if end_of_field or begin_of_field then BEEP(BeepOnSS);
746I     until (end_of_field and (not confirm)) or begin_of_field or special;
747I     tempb1:=len; { Strip Trailing Blanks }
748I     if itype='C' then
749I       while (item[tempb1]=' ') and (tempb1>0) do tempb1:=tempb1-1;
750I     item[0]:=chr(tempb1);
```

```
751I     range_check:=TRUE;
752I     if itype='D' then
753I     begin
754I       range_check:=check_date(item,item_low,item_high);
755I       if not range_check then message(3);
756I     end;
757I     if itype='Y' then
758I       if not (item[1] in ['Y','N']) then
759I       begin
760I         range_check:=FALSE;
761I         message(6);
762I       end;
763I     if itype='M' then
764I       if not (item[1] in ['M','F']) then
765I       begin
766I         range_check:=FALSE;
767I         message(7);
768I       end;
769I   until range_check;
770I   end  { If non numeric type of item} else { if Numeric }
771I if (itype='N') then
772I begin
773I   tcol:=len;
774I   repeat { Until range_check=TRUE }
775I   len:=tcol;
776I   tempb1:=len;
777I   len:=pos('.',item);
778I   range_check:=FALSE;
779I   if len=0 then len:=tempb1
780I   else len:=len-1;{ Item has decimal point }
781I   hcol:=col+len-1;
782I   pcol:=len;
783I   gotoxy(hcol,lin);
784I   special:=FALSE;
785I   sign_flag:=FALSE;
786I   end_of_field:=FALSE;
787I   dec_flag:=FALSE;
788I   repeat
789I     valid_char:=FALSE;
790I     if getchar('#',kchar) then
791I     begin { Not Special }
792I     case kchar of
793I '-' : { Sign } if not sign_flag then valid_char:=TRUE;
794I '.' :  { Decimal point }
795I      if (len<>tempb1) and (not dec_flag) then
796I      begin
797I        hcol:=hcol+2; pcol:=len+2; gotoxy(hcol,lin);
798I        dec_flag:=TRUE; sign_flag:=TRUE;
799I      end;
800I '0'..'9': valid_char:=TRUE;
```

```
801I      end { Case kchar };
802I      { sign_flag = if FALSE we allow minus (-) sign }
803I      { dec_flag = if FALSE we allow decimal (.) point }
804I      if (valid_char) and (not dec_flag) then { Integer Portion }
805I      begin
806I        if (item[1]<>' ') and (len<>tempb1) and (sign_flag) and
807I           not ((ord(item[0])>1) and (item[1]='-') and (item[2]='0')) then
808I           message(8) { Overflow Numeric Field }
809I        else
810I        begin
811I          if  (not sign_flag)  then  { Erase Old Entry. Start New One }
812I          begin                      { Sign Allowed }
813I            for pcol:=1 to len-1 do item[pcol]:=' ';
814I            if tempb1>len then
815I               for pcol:=len+2 to tempb1 do item[pcol]:='0';
816I            if (kchar[1]<>'0') then sign_flag:=TRUE;
817I
818I            { Check if field is too small to accomodate a minus sign }
819I            if kchar[1]='-' then
820I            begin
821I              if (len-1)<=0 then
822I              begin
823I                message(9);
824I                sign_flag:=FALSE;
825I              end else
826I              begin
827I                item[len-1]:='-';
828I                item[len]:='0';
829I              end;
830I            end else
831I              item[len]:=kchar[1];
832I
833I            gotoxy(col,lin);
834I            writec(item);
835I            gotoxy(hcol,lin);
836I          end else
837I          begin
838I            { Insert A Digit. No Sign Allowed }
839I            if not ((item[len]='0') and (item[len-1]='-')) then
840I              if not end_of_field then
841I                for pcol:=1 to len-1 do item[pcol]:=item[pcol+1];
842I
843I            item[len]:=kchar;
844I            gotoxy(col,lin);
845I            writec(item);
846I            gotoxy(hcol,lin);
847I          end;
848I          if (item[1]<>' ') and (len=tempb1) then end_of_field:=TRUE;
849I        end;
850I      end { Integer Portion }
```

```
851I      else { Decimal Portion }
852I        if valid_char and (sign_flag) then
853I        begin
854I          item[pcol]:=kchar[1];
855I          writec(item[pcol]);
856I          if not end_of_field then
857I              begin
858I                  hcol:=hcol+1;
859I                  pcol:=pcol+1
860I              end;
861I          if pcol>tempb1 then
862I              begin
863I                  hcol:=hcol-1;
864I                  pcol:=pcol-1;
865I                  end_of_field:=TRUE
866I              end;
867I          gotoxy(hcol,lin);
868I        end;
869I      end { getchar is FALSE } else { getchar is TRUE }
870I    special:=TRUE;
871I    { Special Keys. DEL}
872I    if special then
873I    begin
874I      ret:=kchar;
875I      special:=FALSE;
876I      if (ord(kchar[0])=2) then
877I      begin { Case }
878I      case kchar[2] of
879I        dl,l:{ DELETE KEY PRESSED OR LEFT ARROW KEY }
880I        case dec_flag of
881I          False: { Integer Portion }
882I          begin
883I            sign_flag:=TRUE;
884I            for pcol:=len downto 2 do item[pcol]:=item[pcol-1];
885I            if (item[len] in [' ','-']) then
886I                begin
887I                    item[len]:='0';
888I                    sign_flag:=FALSE;
889I                end;
890I            item[1]:=' ';
891I            gotoxy(col,lin);
892I            writec(item);
893I            gotoxy(hcol,lin);
894I            end_of_field:=FALSE;
895I          end { F };
896I          True: { Decimal Portion }
897I            { Put 0 @ Cursor. Check If Going To Integer Part}
898I            if pict[pcol-1]='.' then  {Are We In Integer Part?}
899I            begin {YES. Initialize Variables}
900I              hcol:=col+len-1;
```

```
901I              gotoxy(hcol,lin);
902I              dec_flag:=FALSE;
903I              end_of_field:=FALSE;
904I            end else
905I            begin
906I              if not end_of_field then
907I              begin
908I                  hcol:=hcol-1;
909I                  pcol:=pcol-1
910I              end;
911I              gotoxy(hcol,lin);
912I              item[pcol]:='0';
913I              writec(item[pcol]);
914I              gotoxy(hcol,lin);
915I              end_of_field:=FALSE;
916I            end;
917I         { T }
918I       end { dec_flag CASE };
919I       u,d,l,r,pu,pd,f1,f2,f3,f4,f5,f6,f7,f8,f9,f10: special:=TRUE;
920I       end; { DELETE KEY CASE }
921I    end { Case } else
922I    if (ord(kchar[1]) in [cr, esc]) then special:=TRUE;
923I end { Special };
924I if end_of_field and (not special) then BEEP(BeepOnSS);
925I until special or (end_of_field and (not confirm));
926I
927I    { Get Old Length back  and  find point position }
928I len:=tcol;
929I pcol:=pos('.',pict);
930I
931I    { If no decimal point and 1st position is minus or blank then set to 0 }
932I if (item[len] in [' ','-']) and (pcol=0) then
933I begin
934I    item[len]:='0';
935I    gotoxy(col,lin);
936I    writec(item);
937I end;
938I
939I temp_item:=item;
940I strip_blanks(item);
941I range_check:=check_range(item,item_low,item_high);
942I if not range_check then
943I      begin
944I          message(4);
945I          item:=temp_item;
946I      end;
947I
948I until range_check;
949I end;{ Numeric }
950I end { Retrieve } else
```

```
951I begin
952I   if itype='N' then strip_blanks(item};
953I   if itype='C' then
954I   begin
955I     tempb1:=len; { Strip Trailing Blanks }
956I     while (item[tempb1]=' ') and (tempb1>0) do tempb1:=tempb1-1;
957I     item[0]:=chr(tempb1);
958I   end;
959I end;
960I witem:=item; { Return result Back To witem }
961I END;{ GETITEM PROCEDURE}
962
963 (*   This is a summary of the procedures in SPLICE1.PAS
964
965 PROCEDURE BEEP(BeepOn: BOOLEAN);              { Sound Beep if BeepOn=TRUE }
966 PROCEDURE CLEAR_KBD;                          { Clear Keyboard Buffer }
967 PROCEDURE COLOR(foregr,backgr:BYTE);          { Set Color }
968 PROCEDURE WRITEC(vtext: STR80);               { Write Chars Using Color }
969 FUNCTION  SET_MONITOR_Type: INTEGER;          { Determine Monitor Type }
970 { Display A Screen Sculptor Screen }          { 2=Color, 3=Mono }
971 PROCEDURE DISPLAY_SCREEN(screen_name: STR80; Var file_existSS: BOOLEAN);
972 { Display And Get An Item From Screen. See Detailed Desription In Manual }
973 PROCEDURE GETITEM(COL,LIN,LEN :          BYTE;     { Column, Line, Length }
974                   ITYPE :                CHAR;     { Type= C, N, D, Y, M  }
975               Var WITEM :                STR80;    { Variable Name        }
976                   PICT :                 STR80;    { Picture X, U, L, 9, 8 # }
977                   ITEM_LOW,ITEM_HIGH :   STR80;    { Range - Numerics/Date Only}
978               Var RET :                  STR2;     { Returned Code        }
979                   RETRIEVE :             BOOLEAN;  { False=Disp Only, True=Get }
980                   FGR_COLOR,BGR_COLOR :  BYTE      { Colors Foregr, Backgr }
981                   ); EXTERN;                                              *)
982
983
984 {-*-*-*
```

```
1001|    GOTOXY (1, 25);                    { Position cursor col 1, row 25 }
1002|    ClrEol;                            { Clear row 25 with blanks }
1003|    WRITE ('     Do you accept the input values thus far?    Yes or No    ');
1004|    answerSS := 'N';
1005|    GETITEM (70, 25, 1, 'Y', answerSS, 'U', '', '', retSS, True, 12, 1);
1006|    GOTOXY (1, 25);                    { Position cursor col 1, row 25 }
1007|    TextBackground (1);                { Set background color to BLUE }
1008|    ClrEol;                            { Clear row 25 with blanks }
1009| End;   { Procedure ACCEPT_INPUTS }
1010|
1011|
1012| PROCEDURE RET_STATUS;
1013| { Check Status Of Variable retSS and return a code in 'actionSS' & set 'varSS'
1014|   This procedure is called immediately following GETITEM }
1015|
1016| { Input to this procedure:
1017|   when retSS is length 1 the values are any of the ASCII chars
1018|   when retSS is length 2 the values are uSS, lSS, puSS, pdSS, function keys
1019|                                        dSS, rSS
1020|                                         ( See Const Section For Meanings ) }
1021| { Output:
1022|   The following codes are returned in actionSS : nextSS, prevSS,
1023|                                                  exitSS, staySS }
1024| { Based upon 'actionSS' this procedure will then set 'varSS' to an integer,
1025|   which represents the next item (variable ) to get.  }
1026|
1027| Begin
1028|    last_field_actionSS := exitSS;
1029|    actionSS := nextSS;                { Initialize Action Code }
1030|    IF retrieveSS THEN                 { Is retrieveSS TRUE? }
1031|        Begin
1032|            IF ord (retSS[0]) = 2 THEN  { Is retSS length 2 ? }
1033|                Begin
1034|                    CASE retSS[2] of
1035|                        { Action to be taken depending on last key pressed }
1036|                        uSS, lSS : actionSS := prevSS;  { Up Key, Left Key }
1037|                        dSS, rSS : actionSS := nextSS;  {Down Key, Right Key}
1038|                        puSS : actionSS := staySS;      ( Page Up }
1039|                        pdSS : actionSS := staySS;      { Page Down }
1040|                                                        { Function Keys }
1041|                        f1SS, f2SS, f3SS, f4SS, f5SS,
1042|                        f6SS, f7SS, f8SS, f9SS, f10SS : actionSS := staySS;
1043|                    End  { Case ret };
1044|                End
1045|            ELSE    ( retSS is length 1 }
1046|                Begin
1047|                    IF retSS = escSS THEN actionSS := staySS    { Escape Key }
1048|                End;
1049|        { Any other key not in above list will keep actionSS=nextSS }
1050|        End; {retrieveSS}
```

```
1051        CASE actionSS of
1052            staySS: ;
1053            nextSS: Begin
1054                        varSS := varSS + 1;
1055                        IF varSS > screen_fieldSS THEN varSS := 1;
1056                        IF last_fieldSS AND retrieveSS THEN
1057                            actionSS := last_field_actionSS
1058                    End;
1059            prevSS: Begin
1060                        varSS := varSS - 1;
1061                        IF varSS < 1 THEN varSS := screen_fieldSS
1062                    End;
1063            exitSS: ;
1064        End; { CASE }
1065  End; {PROCEDURE RET_STATUS}
1066
1067
1068  PROCEDURE GETREAL{COL,LIN,LEN :          BYTE;     { Column, Line, Length }
1069                    ITYPE :                CHAR;     { Type= C, N, D, Y, M  }
1070                Var WITEM :                REAL;     { Numerci Variable Name }
1071                    PICT :                 STR80;    { Picture X, U, L, 9, 8 # }
1072                    ITEM_LOW,ITEM_HIGH :   REAL;     { Range - Numerics/Date Only}
1073                Var RET :                  STR2;     { Returned Code         }
1074                    RETRIEVE :             BOOLEAN;  { False=Disp Only, True=Get }
1075                    FGR_COLOR,BGR_COLOR :  BYTE);    { Colors Foregr, Backgr }
1076
1077  { This Procedure converts numeric to string before calling GETITEM }
1078  { It then converts the result back to numeric }
1079
1080  Var
1081     numSS, numloSS, numhiSS: STR80;
1082     errorcodeSS,dec_posSS: INTEGER;
1083
1084  Begin
1085    { Get # of Decimal Positions }
1086    dec_posSS:=ord(pict[0])-pos('.',pict);
1087    { Convert item, low and high range to string }
1088    STR (witem:0:dec_posSS,numSS);
1089    STR (item_low:0:dec_posSS,numloSS);
1090    STR (item_high:0:dec_posSS,numhiSS);
1091    GETITEM (col,lin,len,itype,numSS,pict,numloSS,numhiSS,
1092             ret,retrieve,fgr_color,bgr_color);
1093    { Convert string to numeric item }
1094    VAL (numSS, witem, errorcodeSS);
1095  End;   { Procedure GETREAL }
1096
1097
1098  PROCEDURE GETINT(COL,LIN,LEN :           BYTE;     { Column, Line, Length }
1099                   ITYPE :                 CHAR;     { Type= C, N, D, Y, M  }
1100               Var WITEM :                 INTEGER;  { Numerci Variable Name }
```

```
1101|                PICT :                STR80;    { Picture X, U, L, 9, 8 # }
1102|                ITEM_LOW,ITEM_HIGH :  INTEGER;  { Range - Numerics/Date Only}
1103|             Var RET :                STR2;     { Returned Code        }
1104|                RETRIEVE :            BOOLEAN;  { False=Disp Only, True=Get }
1105|                FGR_COLOR,BGR_COLOR : BYTE);    { Colors Foregr, Backgr }
1106|
1107| { This Procedure converts numeric to string before calling GETITEM }
1108| { It then converts the result back to numeric }
1109|
1110| Var
1111|    numSS, numloSS, numhiSS: STR80;
1112|    errorcodeSS : INTEGER;
1113|
1114| Begin
1115|   { Convert item, low and high range to string }
1116|   STR (witem,numSS);
1117|   STR (item_low,numloSS);
1118|   STR (item_high,numhiSS);
1119|   GETITEM (col,lin,len,itype,numSS,pict,numloSS,numhiSS,
1120|            ret,retrieve,fgr_color,bgr_color);
1121|   { Convert string to numeric item }
1122|   VAL (numSS, witem, errorcodeSS);
1123| End;   { Procedure GETINT }
1124|
1125|
1126|
1127|                { End of SCREEN SCULPTOR Global Procedures }
1128|
1129|
1130|
1131| PROCEDURE LINE_SETUP;
1132|
1133| Var
1134|    Temp1 : String [2];
1135|    Temp2 : String [4];
1136|
1137|
1138| Begin  { PROCEDURE LINE_SETUP }
1139|    IF Siteinfo.siteno < 10 THEN
1140|        STR (Siteinfo.siteno:1, Temp1)                {**********************}
1141|    ELSE                                              {                      }
1142|        STR (Siteinfo.siteno:2, Temp1);               {  Build the Contract  }
1143|    Temp2 := Copy (Costtable [I].clin, 1, 4);         {  Line Number. (CLIN) }
1144|    IF Siteinfo.siteno < 10 THEN                      {                      }
1145|        Line_Number := CONCAT ('0', Temp1, Temp2)     {**********************}
1146|    ELSE
1147|        Line_Number := CONCAT (Temp1, Temp2);
1148|        {************************************************}
1149|        {   Accumulate the three totals for each section   }
1150|        {************************************************}
```

```
1151|    Subtotals [ORD (mode), 1] := Subtotals [ORD (mode), 1] + Extended_Price;
1152|    IF Mode = Hard THEN
1153|            Subtotals [ORD (mode), 2] := Subtotals [ORD (mode), 2]
1154|                                        + (Quantity * Costtable[I].basemaint
1155|                                        * Maint_Factor * Maint_Months)
1156|    ELSE
1157|        IF Mode = Soft THEN
1158|            Subtotals [ORD (mode), 2] := Subtotals [ORD (mode), 2]
1159|                                        + (Costtable[I].basemaint
1160|                                        * Maint_Factor * Maint_Months)
1161|        ELSE
1162|            Subtotals [ORD (mode), 2] := Subtotals [ORD (mode), 2]
1163|                                        + (Costtable[I].basemaint
1164|                                        * Maint_Factor * Quantity);
1165|    Subtotals [ORD (mode), 3] := Subtotals [ORD (mode), 3]
1166|                                + (Costtable[I].instcost * Quantity);
1167|        {*****************************************************}
1168|        {   Accumulate the O&MN and OPN totals for each section   }
1169|        {*****************************************************}
1170|
1171|    IF (Mode = Hard) OR (Mode = Soft) THEN        { Add to OPN Total }
1172|        Totals [ORD (mode), 2] := Totals [ORD (mode), 2] + Extended_Price
1173|    ELSE                                         { Add to O&MN Total }
1174|        Totals [ORD (mode), 1] := Totals [ORD (mode), 1] + Extended_Price;
1175| End;   { Procedure LINE_SETUP }
1176|
1177|
1178| PROCEDURE HEADERS;
1179|
1180| {*************************************************************************}
1181| {    This procedure generates the headers which are written at the top of    }
1182| {    each section of the delivery order.                                    }
1183| {*************************************************************************}
1184|
1185| Begin { Procedure HEADERS }
1186|    WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '" "', '" "',
1187|                       '" "', '" "', '" "', '" "', '"Component"', '"System"');
1188|    WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '" "', '" "',
1189|                       '" "', '" "', '"Total"', '" "', '"Downtime"', '"Downtime"');
1190|    WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '"Unit"',
1191|                       '" "', '"Months"', '"Component"', '"Unit"', '"Total"',
1192|                       '"Credit"', '"Credit"');
1193|    WRITELN (Diskfile, '"Contract"', '"Feature"', '" "', '" "', '" "', '"Total"',
1194|                       '"Monthly"', '"Maint"', '"of"', '"Factored"',
1195|                       '"Install"', '"Install"', '"Factor"', '"Factor"');
1196|    WRITELN (Diskfile, '"Line No."', '"Numbers"', '"Description"', '"Qty"',
1197|             '"Unit Price"', '"Unit Price"', '"Maint"', '"Factor"', '"Maint"',
1198|             '"Maint"', '"Costs"', '"Costs"',  '"Per Hour"', '"Per Month"');
1199|    WRITELN (Diskfile);
1200| End;   {  Procedure HEADERS  }
```

```
1201
1202
1203  PROCEDURE WRITE_A_LINE;
1204
1205  {*************************************************************}
1206  {  This procedure is called by two disk file print routines,     }
1207  {  PRINT_MAINT and PRINT_DOC_or_TRNG to write the data elements  }
1208  {  associated with each CLIN to the output disk file.            }
1209  {*************************************************************}
1210
1211  Begin  { Procedure WRITE_A_LINE }
1212     LINE_SETUP;
1213     WRITELN (Diskfile, '"', Line_Number:7, '" "', Costtable[I].featureno:8,
1214              '" "', Costtable[I].descript:28, '"', Quantity:3,
1215              Costtable[I].purchprice:13:2, Extended_Price:12:2,
1216              Costtable[I].basemaint:9:2, Maint_Factor:8:3, '" "',
1217              Costtable[I].basemaint * Maint_Factor * Quantity:12:2,
1218              '" "', '" "', '" "', '" "');
1219  End;   { Procedure WRITE_A_LINE }
1220
1221
1222  PROCEDURE PRINT_DOC_or_TRNG;
1223
1224  {*************************************************************}
1225  {  Sets Parameters for FDC Training Courses and Documentation.   }
1226  {  Sets both Maint_Months and Maint_Factor to zero (0)           }
1227  {*************************************************************}
1228
1229  Begin  {  Procedure PRINT_DOC_or_TRNG  }
1230     Maint_Months := 0;        { No maintenance on training/documentation }
1231     Maint_Factor := 0;        { No maintenance uplift on training/documentation }
1232     Extended_Price := Quantity * Costtable[I].purchprice;
1233     WRITE_A_LINE;
1234  End;   {  Procedure PRINT_DOC_or_TRNG  }
1235
1236
1237  PROCEDURE COMPUTE_SECTION_TOTALS (Section_Title : Title);
1238
1239  {*************************************************************************}
1240  {    This procedure prints the totals accumulated for each section after the }
1241  {    last contract line number and associated data elements are printed.  It }
1242  {    then prints the title for the next section and prints a new set of      }
1243  {    headers.  After the last contract line number and associated data       }
1244  {    elements have been printed, the O&MN and OPN totals for each section    }
1245  {    and the O&MN and OPN grand totals are printed.                          }
1246  {*************************************************************************}
1247
1248  Var
1249     K : Integer;
1250     OMN_Total, OPN_Total, Maint_Totals : Real;
```

```
1251
1252  Begin  { Procedure COMPUTE_SECTION_TOTALS }
1253     {*********************************************************************}
1254     {   Add maintenance and installation costs for each section to O&MN   }
1255     {   section totals.                                                   }
1256     {*********************************************************************}
1257     Totals [ORD (mode), 1] := Totals [ORD (mode), 1] + Subtotals [ORD (mode), 2]
1258                               + Subtotals [ORD (mode), 3];
1259     IF Section_Title = 'Other' THEN
1260     {*********************************************************************}
1261     {    If processing the last section, check to see if "SITE POWER      }
1262     {    PREPARATIONS" are to be included, then print the O&MN and OPN    }
1263     {    section totals and grand totals.                                 }
1264     {*********************************************************************}
1265         Begin
1266             { Compute Total amount of funds associated with maintenance }
1267             Maint_Totals := Subtotals [0,2] + Subtotals [1,2] + Subtotals [4,2];
1268             { Write Maintenance Section Totals.  Also, write the Hardware
1269               and Software Section Totals.  Show the total amount of funds
1270               required for Maintenance.  }
1271             WRITELN (Diskfile);
1272             WRITELN (Diskfile,
1273                      '" "', '" "', '" "', '"Totals:"',
1274                      Subtotals [4, 1], '" "', '" "', '" "',
1275                      Subtotals [4, 2], '" "',
1276                      Subtotals [4, 3]);
1277             WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '" "',
1278                      '"Hardware:"', '" "', Subtotals [0, 2]);
1279             WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '" "',
1280                      '"Software:"', '" "', Subtotals [1, 2]);
1281             WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '" "', '" "',
1282                      '"   Total:"', '" "', Maint_Totals);
1283             IF Site_Preps = 'Y' THEN  {  Is the response a "Y" or "N"?  }
1284                 Begin
1285                     WRITELN (Diskfile);
1286                     WRITELN (Diskfile, '    "', Section_Title, '"');
1287                     HEADERS;
1288                     {*************************************************}
1289                     {  Set up conditions to process Site Preparation    }
1290                     {  charges.                                         }
1291                     {*************************************************}
1292                     Quantity := 1;
1293                     I := 1;              { I=1 for SITE PREPS }
1294                     Mode := Other;
1295                     Maint_Factor := 0;
1296                     Extended_Price := Quantity * Costtable[I].purchprice;
1297                     WRITE_A_LINE;
1298                 End;
1299             WRITELN (Diskfile);
1300             WRITELN (Diskfile);
```

```
1301            WRITELN (Diskfile,  '" "', '"SUBTOTALS:"', '"                O&MN"',
1302                                '" "', '"     OPN"');
1303            WRITELN (Diskfile);
1304            WRITELN (Diskfile, '" "', '"HARDWARE"', Totals [0, 1],
1305                               '" "', Totals [0, 2]);
1306            WRITELN (Diskfile, '" "', '"SOFTWARE"', Totals [1, 1],
1307                               '" "', Totals [1, 2]);
1308            WRITELN (Diskfile, '" "', '"DOCUMENTATION"', Totals [2, 1],
1309                               '" "', Totals [2, 2]);
1310            WRITELN (Diskfile, '" "', '"TRAINING"',
1311                               Totals [3, 1], '" "', Totals [3, 2]);
1312            WRITELN (Diskfile, '" "', '"MAINTENANCE"',
1313                               Totals [4, 1], '" "', Totals [4, 2]);
1314            WRITELN (Diskfile, '" "', '"OTHER"', Totals [5, 1],
1315                               '" "', Totals [5, 2]);
1316            WRITELN (Diskfile);
1317            {  Initialize O&MN and OPN totals  }
1318            OMN_TOTAL := 0;
1319            OPN_TOTAL := 0;
1320            {    Compute the O&MN and OPN grand totals.  }
1321            FOR K := 0 to 5 DO
1322                Begin
1323                    OMN_TOTAL := OMN_TOTAL + Totals [K, 1];
1324                    OPN_TOTAL := OPN_TOTAL + Totals [K, 2];
1325                End;
1326            WRITELN (Diskfile, '" "', '"TOTALS:"',
1327                               OMN_Total, '" "', OPN_Total);
1328        End
1329    ELSE
1330        Begin
1331            {************************************************************}
1332            {  Print the totals for the section just finished, then print }
1333            {  the next section title and new headers.                    }
1334            {************************************************************}
1335            WRITELN (Diskfile);
1336            WRITELN (Diskfile, '" "', '" "', '" "', '" "', '"Totals:"',
1337                     Subtotals [ORD (mode), 1], '" "', '" "', '" "',
1338                     Subtotals [ORD (mode), 2], '" "',
1339                     Subtotals [ORD (mode), 3]);
1340            WRITELN (Diskfile);
1341            WRITELN (Diskfile, '    "', Section_Title, '"');
1342            HEADERS;
1343        End;
1344 End;   {  Procedure COMPUTE_SECTION_TOTALS  }
1345
1346
1347
1348 {-*-*-*
```

```
1351
1352  -*-*-*-
```

```
1401
1402  PROCEDURE PICK_A_SITE;
1403
1404  {*************************************************************************}
1405  {  This procedure has four main functions.  First, it determines the site to }
1406  {  be configured.  Then it obtains the effective date for the delivery order.}
1407  {  It THEN obtains the file name for the output file from this session.  And }
1408  {  finally, it builds the SITE.INFO array which contains site specIFic data  }
1409  {  from the CONFIG.SIT file.                                                 }
1410  {*************************************************************************}
1411
1412  Var
1413     Datain                    : String [80];
1414     Siteno, Element           : Integer;
1415     Err, Temp_Site            : Integer;
1416     Textin                    : Text;
1417
1418
1419  PROCEDURE GET_SITE_NUMBER;
1420
1421  Begin  { Procedure GET_SITE_NUMBER }
1422     { Initialize Variables To Default Values }
1423     Siteno := 1;
1424
1425     {*************************************************************************}
1426     {    Present the user with a list of the SPLICE sites by name and number.  }
1427     {*************************************************************************}
1428
1429     screen_fieldSS := 1;
1430     varSS := 1;
1431     retrieveSS := FALSE;
1432     last_fieldSS := FALSE;
1433     DISPLAY_SCREEN (Screenfile);        { Display Screen }
1434
1435     REPEAT { until answerSS = 'Y' }
1436     { Display Items. Change retrieveSS to TRUE and INPUT items}
1437     REPEAT { until actionSS = exitSS }
1438         REPEAT
1439             GETINT(69,24,2,'N',Siteno,'##',1,58,retSS,retrieveSS,14,1);
1440             IF Siteno = 23 THEN
1441                 Begin
1442                     GoToXY (20, 25);
1443                     Color (15, 4);
1444                     WRITE (^G,' Site INACTIVE and not available for selection ');
1445                 End;
1446         UNTIL Siteno <> 23;
1447         IF varSS = screen_fieldSS THEN last_fieldSS := TRUE;
1448         RET_STATUS; { Check the code in "retSS". Set  "varSS" and "actionSS" }
1449
1450         { Check to see whether to switch retrieveSS to true }
```

```
1451        IF last_fieldSS and (not retrieveSS) THEN
1452            Begin
1453                retrieveSS := TRUE;
1454                last_fieldSS := FALSE;
1455                actionSS := staySS;
1456                varSS := 1;
1457            End
1458        ELSE
1459            last_fieldSS := FALSE;
1460    UNTIL actionSS = exitSS;
1461    ACCEPT_INPUTS;
1462    UNTIL answerSS = 'Y';
1463 End;   { Procedure GET_SITE_NUMBER }
1464
1465
1466 Begin  {  Procedure PICK_A_SITE  }
1467    GET_SITE_NUMBER;
1468    ASSIGN (Textin, File2);
1469    RESET (Textin);
1470    {  Initialize "Temp_Site" and "Stock_Point"  }
1471    Temp_Site := 0;
1472    Stock_Point := ' ';
1473    WHILE Not EOF (Textin) AND (Temp_Site < Siteno) DO
1474        {*********************************************************************}
1475        {    Read the file "CONFIG.SIT" until the site number in the file is }
1476        {    equal to the site number input by the user.                      }
1477        {*********************************************************************}
1478        Begin
1479            READLN  (Textin, Datain);
1480            Val (Copy (Datain, 1, 2), Temp_Site , Err);
1481
1482            {  Is site # from COSTS.IN = site # selected for configuration?  }
1483            IF Siteno = Temp_Site THEN
1484                Begin
1485                    { Builds the site information record }
1486                    SiteInfo.siteno := siteno;
1487                    SiteInfo.sitename := Copy (Datain, 3, 27);
1488                    Val (Copy (Datain, 31, 1), SiteInfo.documentation, Err);
1489                    Val (Copy (Datain, 33, 1), SiteInfo.training, Err);
1490                    SiteInfo.maint_options  := Copy (Datain, 35, 4);
1491                    SiteInfo.maint_response := Copy (Datain, 40, 1);
1492                    SiteInfo.site_type := Copy (Datain, 42, 1);
1493                    Val (Copy (Datain, 44, 6), SiteInfo.site_inst_cost, Err);
1494                End;
1495        End;
1496    Stock_Point := SiteInfo.site_type;
1497    CLOSE (Textin);
1498 End;   {  Procedure PICK_A_SITE  }
1499
1500
```

```
1501| PROCEDURE BUILD_COST_TABLE;
1502|
1503| {*************************************************************************}
1504| {  This procedure's primary function is to build the COSTTABLE array.  This  }
1505| {  contains the identIFication data for each component from the COSTS.IN file}
1506| {  as well as cost/maintenance data, which is updated by the applicable up-  }
1507| {  lift or discount factors.  The array currently contains room for 200      }
1508| {  entries.                                                                  }
1509| {*************************************************************************}
1510|
1511| Var
1512|    Textin : Text;
1513|    Datain : String [80];              { Data coming in from COSTS.IN file }
1514|    Errorcode, Count : Integer;
1515|    LCN_Purch_Esc_Rate, LCN_Momaint_Esc_Rate, Document_Esc_Rate       : Real;
1516|    Purch_Esc_Rate, Instal_Esc_Rate, Train_Esc_Rate                   : Real;
1517|    SPLICENet_SW_Maint_Esc_Rate, SPLICENet_SW_Purch_Esc_Rate          : Real;
1518|    FDC_SNA_Purch_Esc_Rate, LCN_SW_Esc_Rate                           : Real;
1519|
1520| PROCEDURE GET_RATES;
1521| {*************************************************************************}
1522| { This procedure serves three main functions: it obtains the name of the      }
1523| { current user, then obatins all the escalation/discount rates, and finally   }
1524| { several numbers of Maint_Months, which are used for maintenance calculations.}
1525| {*************************************************************************}
1526|
1527| Var
1528|    Month_Index : String [2];
1529|    PRN_Name, Effective_Date  : String [8];
1530|    Index, Position : Integer;
1531|
1532|
1533| PROCEDURE INITIALIZE_RATES;
1534|
1535| {Initialize Variables To Default Values}
1536|
1537| Begin  { Procedure INITIALIZE_RATES }
1538|
1539|    Purch_Esc_Rate := 0.00;
1540|    LCN_Purch_Esc_Rate := 0.00;
1541|    SPLICENet_SW_Maint_Esc_Rate := 0.00;
1542|    SPLICENet_SW_Purch_Esc_Rate := 0.00;
1543|    Emerg_Maint_Rate := 0.0;
1544|    FDC_SNA_Purch_Esc_Rate := 0.00;
1545|    LCN_Momaint_Esc_Rate := 0.000;
1546|    LCN_SW_Esc_Rate := 0.000;
1547|    Instal_Esc_Rate := 0.000;
1548|    Train_Esc_Rate := 0.00;
1549|    Document_Esc_Rate := 0.00;
1550|    Momaint_Esc_Rate := 0.000;
```

```
1601            10:  GETREAL(71,17,4,'N',Train_Esc_Rate,
1602                  '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1603            11:  GETREAL(70,18,5,'N',Document_Esc_Rate,
1604                  '##.##',-1.00,9.99,retSS,retrieveSS,15,3);
1605            12:  GETREAL(70,19,5,'N',Momaint_Esc_Rate,
1606                  '#.###',0.000,9.999,retSS,retrieveSS,15,3);
1607            13:  GETITEM(63,21,8,'C',PRN_NAME,
1608                  'UUUUUUUU','','',retSS,retrieveSS,15,3);
1609            14:  GETINT(37,23,2,'N',Maint_Months,
1610                  '##',0,12,retSS,retrieveSS,15,3);
1611            15:  GETITEM(67,23,8,'D',Effective_Date,
1612                  '88/88/88','01/01/84','12/31/99',retSS,retrieveSS,15,3);
1613        End;    { CASE }
1614
1615    IF varSS = screen_fieldSS THEN last_fieldSS := TRUE;
1616    RET_STATUS;         { Check code in "retSS".  Set  "varSS" & "actionSS" }
1617
1618    { Check to see whether to switch retrieveSS to true }
1619    IF last_fieldSS AND (not retrieveSS) THEN
1620        Begin
1621            retrieveSS := TRUE;
1622            last_fieldSS := FALSE;
1623            actionSS := staySS;
1624            varSS := 1;
1625        End
1626    ELSE
1627        last_fieldSS := FALSE;
1628    UNTIL actionSS = exitSS;
1629    ACCEPT_INPUTS;
1630    UNTIL answerSS = 'Y';
1631 End;   { Procedure GET_RATE_INPUTS }
1632
1633
1634 Begin  { Procedure GET_RATES }
1635    INITIALIZE_RATES;
1636    GET_RATE_INPUTS;
1637    { Generate the correct escalation & discount rates }
1638    FDC_SNA_Purch_Esc_Rate := FDC_SNA_Purch_Esc_Rate + 1;
1639    Purch_Esc_Rate := 1 - Purch_Esc_Rate;
1640    LCN_Purch_Esc_Rate := 1 - LCN_Purch_Esc_Rate;
1641    SPLICENet_SW_Maint_Esc_Rate := SPLICENet_SW_Maint_Esc_Rate + 1;
1642    SPLICENet_SW_Purch_Esc_Rate := SPLICENet_SW_Purch_Esc_Rate + 1;
1643    Instal_Esc_Rate := 1 + Instal_Esc_Rate;
1644    Document_Esc_Rate := 1 + Document_Esc_Rate;
1645    Momaint_Esc_Rate := Momaint_Esc_Rate + 1;
1646    Train_Esc_Rate := 1 + Train_Esc_Rate;
1647    LCN_Momaint_Esc_Rate := 1 + LCN_Momaint_Esc_Rate;
1648    LCN_SW_Esc_Rate := 1 + LCN_SW_Esc_Rate;
1649    Emerg_Maint_Rate := 1 + Emerg_Maint_Rate;
1650    { Generate the complete output file name, with LOTUS 1-2-3 "PRN" extension }
```

```
1551|    PRN_Name := 'SPLICE';
1552|    Maint_Months := 0;
1553|    Effective_Date := '09/01/85';
1554| End;   { Procedure INITIALIZE_RATES }
1555|
1556|
1557| PROCEDURE GET_RATE_INPUTS;
1558|
1559| Begin  { Procedure GET_RATE_INPUTS }
1560|    screen_fieldSS := 15;
1561|    varSS := 1;
1562|    retrieveSS := FALSE;
1563|    last_fieldSS := FALSE;
1564|    DISPLAY_SCREEN (Screenfile);        { Display Screen }
1565|    {  If the site selected is a MAP site, blank out the fields related to
1566|       HYPERchannel (LCN) escalation and discount rates.                    }
1567|    IF Stock_Point <> 'S' THEN
1568|        Begin
1569|            COLOR  (1, 1);
1570|            GOTOXY (70, 11);
1571|            WRITE  ('     ');
1572|            GOTOXY (70, 15);
1573|            WRITE  ('     ');
1574|        End;
1575|
1576|    REPEAT { until answerSS = 'Y' }
1577|    { Display Items. Change retrieveSS to TRUE and INPUT items}
1578|    REPEAT { until actionSS = exitSS }
1579|        CASE varSS of
1580|            1:  GETREAL(71,8,4,'N',FDC_SNA_Purch_Esc_Rate,
1581|                 '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1582|            2:  GETREAL(71,9,4,'N',Purch_Esc_Rate,
1583|                 '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1584|            3:  IF Stock_point = 'S' THEN
1585|                    GETREAL(71,10,4,'N',LCN_Purch_Esc_Rate,
1586|                     '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1587|            4:  GETREAL(71,11,4,'N',SPLICENet_SW_Maint_Esc_Rate,
1588|                 '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1589|            5:  GETREAL(71,12,4,'N',SPLICENet_SW_Purch_Esc_Rate,
1590|                 '#.##',0.00,9.99,retSS,retrieveSS,15,3);
1591|            6:  GETREAL(72,13,3,'N',Emerg_Maint_Rate,
1592|                 '#.#',0.0,9.9,retSS,retrieveSS,15,3);
1593|            7:  IF Stock_Point = 'S' THEN
1594|                    GETREAL(70,14,5,'N',LCN_Momaint_Esc_Rate,
1595|                     '#.###',0.000,9.999,retSS,retrieveSS,15,3);
1596|            8:  IF Stock_Point = 'S' THEN
1597|                    GETREAL(70,15,5,'N',LCN_SW_Esc_Rate,
1598|                     '#.###',0.000,9.999,retSS,retrieveSS,15,3);
1599|            9:  GETREAL(70,16,5,'N',Instal_Esc_Rate,
1600|                 '#.###',0.000,9.999,retSS,retrieveSS,15,3);
```

```
1651     PRN_File_Name := CONCAT (PRN_Name, '.PRN');
1652     Day := Copy (Effective_Date, 4, 2);
1653     Month_Index := Copy (Effective_Date, 1, 2);
1654     Val (Month_Index, Index, Errorcode);
1655     Month := Month_Name [Index];
1656     {  Strip trailing blanks off the name of the month  }
1657     Position := POS (' ', Month);
1658     IF Position <> 0 THEN Month := Copy (Month, 1, Position - 1);
1659     Year := Copy (Effective_Date, 7, 2);
1660     Year := CONCAT ('19', Year);
1661  End;   {  Procedure GET_RATES  }
1662
1663
1664  Begin  (  Procedure BUILD_COST_TABLE  }
1665     ASSIGN (Textin, File1);
1666     RESET  (Textin);
1667     Count := 1;
1668     GET_RATES;  {ask user for all discount and escalation rates to be used }
1669     ClrScr;
1670     COLOR (15, 1);
1671     GOTOXY (16, 13);
1672     WRITE ('Constructing cost escalation and discount table.');
1673     READLN (Textin, Datain);
1674     WHILE Not EOF (TEXTIN) DO
1675         Begin
1676             { Build the Costtable array }
1677             Costtable [Count].featureno := Copy (Datain, 6, 6);
1678             Costtable [Count].clin := Copy (Datain, 1, 4);
1679             Costtable [Count].descript := Copy (Datain, 13, 27);
1680             Val (Copy (Datain, 40, 10), Costtable [Count].momaint, Errorcode);
1681             Costtable [Count].basemaint := Costtable [Count].momaint;
1682
1683             { LCN H/W Base Maintenance }
1684             IF (Costtable [Count].featureno > '320100') AND
1685                (Costtable [Count].featureno < '420400') THEN
1686                Costtable [Count].basemaint := Costtable [Count].momaint
1687                                               * LCN_Momaint_Esc_Rate
1688
1689             { LCN S/W Base Maintenance }
1690             ELSE IF (Costtable [Count].featureno = '550801') OR
1691                     (Costtable [Count].featureno = '550901') OR
1692                     (Costtable [Count].featureno = '551001') OR
1693                     (Costtable [Count].featureno = '551101') OR
1694                     (Costtable [Count].featureno = '551201') OR
1695                     (Costtable [Count].featureno = '551301') THEN
1696                     Costtable [Count].basemaint := Costtable [Count].momaint
1697                                                    * LCN_SW_Esc_Rate
1698
1699             {SPLICENet S/W Base Maintenance}
1700             ELSE IF (Costtable [Count].featureno = '550710') OR
```

```
1701                    (Costtable [Count].featureno = '550711') OR
1702                    (Costtable [Count].featureno = '550803') OR
1703                    (Costtable [Count].featureno = '550903') OR
1704                    (Costtable [Count].featureno = '551003') OR
1705                    (Costtable [Count].featureno = '551103') OR
1706                    (Costtable [Count].featureno = '551203') OR
1707                    (Costtable [Count].featureno = '551303') OR
1708                    (Costtable [Count].featureno = '551304') OR
1709                    (Costtable [Count].featureno = '551403') OR
1710                    (Costtable [Count].featureno = '551500') OR
1711                    (Costtable [Count].featureno = '551501') OR
1712                    (Costtable [Count].featureno = '551502') OR
1713                    (Costtable [Count].featureno = '551503') OR
1714                    (Costtable [Count].featureno = '551504') THEN
1715                   Costtable [Count].basemaint := Costtable [Count].momaint
1716                                                * SPLICENet_SW_Maint_Esc_Rate
1717
1718            { Normal Maintenance Escalation }
1719            ELSE Costtable [Count].momaint := Costtable [Count].momaint
1720                                             * Momaint_Esc_Rate;
1721
1722            { 6100  H/W Purchase Escalation }
1723            Val (Copy (Datain, 50, 11), Costtable [Count].purchprice, Errorcode);
1724            IF (Costtable [Count].featureno > '450300') AND
1725               (Costtable [Count].featureno < '450400') THEN
1726               Costtable [Count].purchprice := Costtable [Count].purchprice
1727
1728            { 6100  S/W Purchase Escalation }
1729            ELSE IF (Costtable [Count].featureno > '550701') AND
1730                    (Costtable [Count].featureno < '550710') THEN
1731                   Costtable [Count].purchprice := Costtable [Count].purchprice
1732
1733            {SPLICENet S/W Base Maintenance}
1734            ELSE IF (Costtable [Count].featureno = '550710') OR
1735                    (Costtable [Count].featureno = '550711') OR
1736                    (Costtable [Count].featureno = '550803') OR
1737                    (Costtable [Count].featureno = '550903') OR
1738                    (Costtable [Count].featureno = '551003') OR
1739                    (Costtable [Count].featureno = '551103') OR
1740                    (Costtable [Count].featureno = '551203') OR
1741                    (Costtable [Count].featureno = '551303') OR
1742                    (Costtable [Count].featureno = '551304') OR
1743                    (Costtable [Count].featureno = '551403') OR
1744                    (Costtable [Count].featureno = '551500') OR
1745                    (Costtable [Count].featureno = '551501') OR
1746                    (Costtable [Count].featureno = '551502') OR
1747                    (Costtable [Count].featureno = '551503') OR
1748                    (Costtable [Count].featureno = '551504') THEN
1749                   Costtable [Count].basemaint := Costtable [Count].momaint
1750                                                * SPLICENet_SW_Purch_Esc_Rate
```

```
1751
1752            { Training Escalation }
1753            ELSE IF (Costtable [Count].featureno = '39XXXX') or
1754                    (Costtable [Count].featureno = 'XXXXXX') THEN
1755                    Costtable [Count].purchprice := Costtable [Count].purchprice
1756                                                    * Train_Esc_Rate
1757
1758            { LCN  H/W Purchase Escalation }
1759            ELSE IF (Costtable [Count].featureno > '320100') AND
1760                    (Costtable [Count].featureno < '420400') THEN
1761                    Costtable [Count].purchprice := Costtable [Count].purchprice
1762                                                    * LCN_Purch_Esc_Rate
1763
1764            {FDC SNA Purchase Escalation }
1765            ELSE IF (Costtable [Count].featureno = '550710') THEN
1766                    Costtable [Count].purchprice := Costtable [Count].purchprice
1767                                                    * FDC_SNA_Purch_Esc_Rate
1768
1769            { LCN S/W Purchase Escalation }
1770            ELSE IF (Costtable [Count].featureno = '550801') OR
1771                    (Costtable [Count].featureno = '550901') OR
1772                    (Costtable [Count].featureno = '551001') OR
1773                    (Costtable [Count].featureno = '551101') OR
1774                    (Costtable [Count].featureno = '551201') OR
1775                    (Costtable [Count].featureno = '551301') THEN
1776                    Costtable [Count].purchprice := Costtable [Count].purchprice
1777                                                    * LCN_SW_Esc_Rate
1778
1779            { Documentation Purchase Escalation }
1780            ELSE IF (Costtable [Count].featureno > '710000') AND
1781                    (Costtable [Count].featureno < '749999') THEN
1782                    Costtable [Count].purchprice := Costtable [Count].purchprice
1783                                                    * Document_Esc_Rate
1784
1785            { Site Preparation Installation Escalation }
1786            ELSE IF Costtable [Count].featureno = '000101' THEN
1787                    Costtable [Count].purchprice := SiteInfo.site_inst_cost
1788                                                    * Instal_Esc_Rate
1789
1790            { Normal S/W Purchase Escalation }
1791            ELSE Costtable [Count].purchprice := Costtable [Count].purchprice
1792                                                 * Purch_Esc_Rate;
1793
1794            { Installation Cost Escalation }
1795            Val (Copy (Datain, 62, 10), Costtable [Count].instcost, Errorcode);
1796            IF (Costtable [Count].featureno > '450300') AND
1797               (Costtable [Count].featureno < '450400') THEN
1798               Costtable [Count].instcost := Costtable [Count].instcost
1799            ELSE IF (Costtable [Count].featureno > '550701') AND
1800                    (Costtable [Count].featureno < '550800') THEN
```

```
1801                    Costtable [Count].instcost := Costtable [Count].instcost
1802            ELSE Costtable [Count].instcost := Costtable [Count].instcost
1803                                            * Instal_Esc_Rate;
1804
1805
1806            READLN (Textin, Datain);
1807            Count := Count + 1;
1808         End;
1809     CLOSE (Textin);
1810  End;   {  Procedure BUILD_COST_TABLE  }
1811
1812
1813  PROCEDURE DELIVERY_ORDER_TITLE;
1814
1815  {*************************************************************************}
1816  {    This procedure generates the title page data and first headers to be    }
1817  {    by the "Hardware" section.  The data is written out to the diskfile     }
1818  {    specIFied by the user when prompted for an ouput file Name.             }
1819  {*************************************************************************}
1820
1821  Begin  {  Procedure DELIVERY_ORDER_TITLE  }
1822     ASSIGN  (Diskfile, PRN_File_Name);
1823     REWRITE (Diskfile);
1824     WRITELN (Diskfile, '" "', '" "', '" "', '" "',
1825                        '"Naval Supply Systems Command SPLICE Delivery Order"');
1826     WRITELN (Diskfile);
1827     WRITELN (Diskfile);
1828     WRITELN (Diskfile, '"Site: "', '"', Siteinfo.siteno:2, '"', '"',
1829              Siteinfo.sitename, '"', '" "', '" "',
1830              '"CONTRACT  N66032-84-D-0002"', '" "', '" "', '" "', '" "',
1831              '"Effective Date:  ', Day:2, Month:Length (Month) + 1, Year:5, '"');
1832     WRITELN (Diskfile, '" "', '" "', '" "', '" "', '" "', '"       Initial Order"');
1833     WRITELN (Diskfile);
1834     WRITELN (Diskfile, '"Hardware"');
1835     HEADERS;
1836  End;  {  Procedure DELIVERY_ORDER_TITLE  }
1837
1838
1839  Begin  { Procedure INITIALIZE }
1840     INIT_TOTALS;
1841     OPENING_SCREEN;
1842     PICK_A_SITE;
1843     BUILD_COST_TABLE;
1844     DELIVERY_ORDER_TITLE;
1845
1846  End;   { Procedure INITIALIZE }
1847  {$I SPLICE2.PAS}                        { Name of work procedures include file }
1848I PROCEDURE CONFIGURE_COMPONENTS;
1849I
1850I Var
```

```
1851I    { Input Variables Used For Documentation, Training & Maintenance }
1852I    Computer_Ops, Hardware_Manual, Programmer_Ref            : Integer;
1853I    Sys_Programmer, Training_Group, Data_Communication       : Integer;
1854I    Hardware_Overview, Operator_Training, Sys_Resource       : Integer;
1855I    SPLICENet_Workshop, Sys_Tuning_Xray, TAL, Per_Call_Months : Integer;
1856I
1857I
1858I PROCEDURE CONFIGURE_HARDWARE;
1859I
1860I Var
1861I    Cable_Distance : String [1];
1862I    Add_Expansion, Add_HYPERchannel, Add_Patchpanel, Add_System    : Integer;
1863I    AsyncCtrl, AsyncExtbd, AsyncPchpnl, A510, Bitsync, Bytesync    : Integer;
1864I    Crts, D128MB, D240MB, D540MB, ExpanCab                         : Integer;
1865I    HYPERCab, LPM1000, LPM600, PatchPanel, Printers, RdrPunch      : Integer;
1866I    SysCab, TapeDrv, Trunks                                        : Integer;
1867I
1868I
1869I PROCEDURE INITIALIZE_HARDWARE_INPUTS;
1870I
1871I Begin  { Procedure INITIALIZE_HARDWARE_INPUTS }
1872I     { Initialize Variables To Default Values }
1873I     Add_Expansion := 0;
1874I     Add_HYPERchannel := 0;
1875I     Add_Patchpanel := 0;
1876I     Add_System := 0;
1877I     AsyncCtrl := 0;
1878I     AsyncExtbd := 0;
1879I     AXXX := 0;
1880I     A140 := 0;
1881I     A150 := 0;
1882I     A220 := 0;
1883I     A400 := 0;
1884I     A510 := 0;
1885I     BitSync := 0;
1886I     ByteSync := 0;
1887I     Cable_Distance := 'B';
1888I     CardRdr := 0;
1889I     Crts := 0;
1890I     D128MB := 0;
1891I     D240MB := 0;
1892I     D540MB := 0;
1893I     HYPERcab := 0;
1894I     LIU := 0;
1895I     LPM1000 := 0;
1896I     LPM600 := 0;
1897I     Processors := 0;
1898I     Printers := 0;
1899I     RdrPunch := 0;
1900I     TapeDrv := 0;
```

```
1901I     THYPERchannels := 0;
1902I     Trunks := 0;
1903I End;   { Procedure INITIALIZE_HARDWARE_INPUTS }
1904I
1905I PROCEDURE ODD_ERROR;
1906I
1907I Begin  { Procedure ODD_ERROR }
1908I    COLOR (15, 4);
1909I    GOTOXY (18, 25);
1910I    WRITE (^G, ' Number of disks must be 0 or an EVEN number! ');
1911I End;   { Procedure ODD_ERROR }
1912I
1913I
1914I PROCEDURE CLEAR_MESSAGE;
1915I
1916I Begin  { Procedure CLEAR_MESSAGE }
1917I    TextBackground (1);
1918I    GOTOXY (1, 25);
1919I    ClrEol;
1920I End;   { Procedure CLEAR_MESSAGE }
1921I
1922I
1923I PROCEDURE GET_HARDWARE_INPUTS;
1924I
1925I Begin  { Procedure GET_HARDWARE_INPUTS }
1926I    screen_fieldSS := 25;
1927I    varSS := 1;
1928I    retrieveSS := False;
1929I    last_fieldSS := False;
1930I    DISPLAY_SCREEN (Screenfile);        { Display Screen }
1931I
1932I    REPEAT {until answerSS = 'Y' }
1933I    { Display Items. Change retrieveSS to True and INPUT items}
1934I    REPEAT { until actionSS = exitSS }
1935I        CASE varSS of
1936I            1:  GETINT(40,4,3,'N',Processors,'###',0,256,retSS,retrieveSS,14,1);
1937I            2:  GETINT(40,5,3,'N',Printers,'###',0,12,retSS,retrieveSS,14,1);
1938I            3:  GETINT(40,6,3,'N',Crts,'###',0,999,retSS,retrieveSS,14,1);
1939I            4:  REPEAT
1940I                    GETINT(40,7,3,'N',D128MB,'###',0,128,retSS,retrieveSS,14,1);
1941I                    IF ODD (D128MB) THEN ODD_ERROR
1942I                    ELSE CLEAR_MESSAGE;
1943I                UNTIL not ODD (D128MB);
1944I            5:  REPEAT
1945I                    GETINT(40,8,3,'N',D240MB,'###',0,128,retSS,retrieveSS,14,1);
1946I                    IF ODD (D240MB) THEN ODD_ERROR
1947I                    ELSE CLEAR_MESSAGE;
1948I                UNTIL not ODD (D240MB);
1949I            6:  REPEAT
1950I                    GETINT(40,9,3,'N',D540MB,'###',0,128,retSS,retrieveSS,14,1);
```

```
1951I                   IF ODD (D540MB) THEN ODD_ERROR
1952I                   ELSE CLEAR_MESSAGE;
1953I               UNTIL not ODD (D540MB);
1954I            7: GETINT(40,10,3,'N',AsyncCtrl,'###',0,64,retSS,retrieveSS,14,1);
1955I            8: GETINT(40,11,3,'N',AsyncExtbd,'###',0,2,retSS,retrieveSS,14,1);
1956I            9: GETINT(40,12,3,'N',BitSync,'###',0,128,retSS,retrieveSS,14,1);
1957I           10: GETINT(40,13,3,'N',ByteSync,'###',0,128,retSS,retrieveSS,14,1);
1958I           11: GETINT(40,14,3,'N',TapeDrv,'###',0,128,retSS,retrieveSS,14,1);
1959I           12: GETINT(40,15,3,'N',RdrPunch,'###',0,12,retSS,retrieveSS,14,1);
1960I           13: GETINT(40,16,3,'N',CardRdr,'###',0,12,retSS,retrieveSS,14,1);
1961I           14: GETINT(40,17,3,'N',LPM1000,'###',0,16,retSS,retrieveSS,14,1);
1962I           15: GETINT(40,18,3,'N',LPM600,'###',0,16,retSS,retrieveSS,14,1);
1963I           16: IF Stock_Point = 'S' THEN
1964I                   GETINT(40,19,3,'N',Trunks,'###',0,2,retSS,retrieveSS,14,1);
1965I           17: GETINT(40,20,3,'N',LIU,'###',0,256,retSS,retrieveSS,14,1);
1966I           18: IF Stock_Point = 'S' THEN
1967I                   GETINT(73,3,3,'N',A400,'###',0,256,retSS,retrieveSS,14,1);
1968I           19: IF Stock_Point = 'S' THEN
1969I                   GETINT(73,4,3,'N',A150,'###',0,256,retSS,retrieveSS,14,1);
1970I           20: IF Stock_Point = 'S' THEN
1971I                   GETINT(73,5,3,'N',AXXX,'###',0,256,retSS,retrieveSS,14,1);
1972I           21: IF Stock_Point = 'S' THEN
1973I                   GETINT(73,6,3,'N',A220,'###',0,256,retSS,retrieveSS,14,1);
1974I           22: IF Stock_Point = 'S' THEN
1975I                   GETINT(73,7,3,'N',A140,'###',0,256,retSS,retrieveSS,14,1);
1976I           23: IF Stock_Point = 'S' THEN
1977I             •     GETINT(73,8,3,'N',A510,'###',0,256,retSS,retrieveSS,14,1);
1978I           24: IF Stock_Point = 'S' THEN
1979I                   GETINT(73,9,3,'N',THYPERchannels,
1980I                    '###',0,128,retSS,retrieveSS,14,1);
1981I           25: IF Stock_Point = 'S' THEN
1982I                   REPEAT
1983I                       GETITEM(75,20,1,'C',Cable_Distance,
1984I                        'U','','',retSS,retrieveSS,14,1);
1985I                       IF (Cable_Distance < 'A') OR (Cable_Distance > 'F') THEN
1986I                           Begin
1987I                               COLOR (15, 4);
1988I                               GOTOXY (28, 25);
1989I                               WRITE (^G, ' Not within range A to F ');
1990I                           End
1991I                       ELSE CLEAR_MESSAGE;
1992I                   UNTIL (Cable_Distance >= 'A') AND (Cable_Distance <= 'F');
1993I       End; { CASE }
1994I
1995I       IF varSS = screen_fieldSS THEN last_fieldSS := True;
1996I       RET_STATUS; { Check code in "retSS". Set  "varSS" and "actionSS" }
1997I
1998I       { Check to see whether to switch retrieveSS to true }
1999I       IF last_fieldSS AND (not retrieveSS) THEN
2000I           Begin
```

```
2001I                retrieveSS := True;
2002I                last_fieldSS := False;
2003I                actionSS := staySS;
2004I                varSS := 1;
2005I            End
2006I        ELSE
2007I            last_fieldSS := False;
2008I    UNTIL actionSS = exitSS;
2009I    ACCEPT_INPUTS;
2010I    UNTIL answerSS = 'Y';
2011I End;   { Procedure GET_HARDWARE_INPUTS }
2012I
2013I
2014I PROCEDURE ADDITIONAL_CABINETS;
2015I
2016I Begin  { Procedure ADDITIONAL_CABINETS }
2017I    screen_fieldSS := 3;
2018I    varSS := 1;
2019I    retrieveSS := False;
2020I    last_fieldSS := False;
2021I    DISPLAY_SCREEN (Screenfile);        { Display Screen }
2022I
2023I    GETINT(40,4,3,'N',Processors,'###',0,256,retSS,False,14,1);
2024I    GETINT(40,5,3,'N',Printers,'###',0,12,retSS,False,14,1);
2025I    GETINT(40,6,3,'N',Crts,'###',0,999,retSS,False,14,1);
2026I    GETINT(40,7,3,'N',D128MB,'###',0,128,retSS,False,14,1);
2027I    GETINT(40,8,3,'N',D240MB,'###',0,128,retSS,False,14,1);
2028I    GETINT(40,9,3,'N',D540MB,'###',0,128,retSS,False,14,1);
2029I    GETINT(40,10,3,'N',AsyncCtrl,'###',0,64,retSS,False,14,1);
2030I    GETINT(40,11,3,'N',AsyncExtbd,'###',0,2,retSS,False,14,1);
2031I    GETINT(40,12,3,'N',BitSync,'###',0,128,retSS,False,14,1);
2032I    GETINT(40,13,3,'N',ByteSync,'###',0,128,retSS,False,14,1);
2033I    GETINT(40,14,3,'N',TapeDrv,'###',0,128,retSS,False,14,1);
2034I    GETINT(40,15,3,'N',RdrPunch,'###',0,12,retSS,False,14,1);
2035I    GETINT(40,16,3,'N',CardRdr,'###',0,12,retSS,False,14,1);
2036I    GETINT(40,17,3,'N',LPM1000, '###',0,16,retSS,False,14,1);
2037I    GETINT(40,18,3,'N',LPM600,'###',0,16,retSS,False,14,1);
2038I    IF Stock_Point = 'S' THEN
2039I        GETINT(40,19,3,'N',Trunks,'###',0,2,retSS,False,14,1);
2040I    GETINT(40,20,3,'N',LIU,'###',0,256,retSS,False,14,1);
2041I    IF Stock_Point = 'S' THEN
2042I        Begin
2043I            GETINT(73,3,3,'N',A400,'###',0,256,retSS,False,14,1);
2044I            GETINT(73,4,3,'N',A150,'###',0,256,retSS,False,14,1);
2045I            GETINT(73,5,3,'N',AXXX,'###',0,256,retSS,False,14,1);
2046I            GETINT(73,6,3,'N',A220,'###',0,256,retSS,False,14,1);
2047I            GETINT(73,7,3,'N',A140,'###',0,256,retSS,False,14,1);
2048I            GETINT(73,8,3,'N',A510,'###',0,256,retSS,False,14,1);
2049I            GETINT(73,9,3,'N',THYPERchannels,'###',0,128,retSS,False,14,1);
2050I            GETITEM(75,20,1,'C',Cable_Distance,'U','','',retSS,False,14,1);
```

```
2051I        End;
2052I    GETINT(68,13,2,'N',PatchPanel,'##',0,16,retSS,False,14,1);
2053I    GETINT(68,14,2,'N',SysCab,'##',0,16,retSS,False,14,1);
2054I    GETINT(68,15,2,'N',ExpanCab,'##',0,16,retSS,False,14,1);
2055I
2056I    REPEAT { until answerSS = 'Y' }
2057I    { Display Items. Change retrieveSS to True and INPUT items}
2058I    REPEAT { until actionSS = exitSS }
2059I        CASE varSS of
2060I            1:  GETINT(75,13,2,'N',Add_PatchPanel,
2061I                 '##',0,8,retSS,retrieveSS,14,1);
2062I            2:  GETINT(75,14,2,'N',Add_System,
2063I                 '##',0,8,retSS,retrieveSS,14,1);
2064I            3:  GETINT(75,15,2,'N',Add_Expansion,
2065I                 '##',0,8,retSS,retrieveSS,14,1);
2066I        End; { CASE }
2067I
2068I        IF varSS = screen_fieldSS THEN last_fieldSS := True;
2069I        RET_STATUS; { Check the code in "retSS". Set  "varSS" and "actionSS" }
2070I
2071I        { Check to see whether to switch retrieveSS to true }
2072I        IF last_fieldSS AND (not retrieveSS) THEN
2073I            Begin
2074I                retrieveSS := True;
2075I                last_fieldSS := False;
2076I                actionSS := staySS;
2077I                varSS := 1;
2078I            End
2079I        ELSE
2080I            last_fieldSS := False;
2081I    UNTIL actionSS = exitSS;
2082I    ACCEPT_INPUTS;
2083I    UNTIL answerSS = 'Y';
2084I End;   { Procedure ADDITIONAL_CABINETS }
2085I
2086I
2087I PROCEDURE PRINT_HW;
2088I {*************************************************************************}
2089I {   This routine is used in the hardware generation process to set up the  }
2090I {   necessary parameters to be used by PRINT_HW when called.               }
2091I {*************************************************************************}
2092I
2093I Begin  { PROCEDURE PRINT_HW }
2094I    Maint_Factor := Momaint_Esc_Rate;
2095I    Extended_Price := Quantity * CostTable[I].purchprice;
2096I    LINE_SETUP;
2097I        {*********************************************************}
2098I        {  Compute System Downtime Credit Component Factor per month }
2099I        {*********************************************************}
2100I    System_Downtime_Component := System_Downtime_Component +
```

```
2101I                                (Quantity * CostTable[I].basemaint
2102I                                * Maint_Factor);
2103I        {*****************************************************}
2104I        { Compute the Component Downtime Credit Factor per hour }
2105I        {*****************************************************}
2106I    Downtime_Credit := (((CostTable[I].purchprice + CostTable[I].instcost) / 48)
2107I                        + (CostTable[I].basemaint * Maint_factor)) * 0.005;
2108I    WRITELN (Diskfile, '"', Line_Number:7, '" "', CostTable[I].featureno:8,
2109I             '" "', CostTable[I].descript:28, '"', Quantity:3,
2110I             CostTable[I].purchprice:13:2, Extended_Price:12:2,
2111I             CostTable[I].basemaint:9:2, Maint_Factor:8:3, Maint_Months:5,
2112I             Quantity * CostTable[I].basemaint * Maint_Factor
2113I             * Maint_Months:12:2, CostTable[I].instcost:8:2,
2114I             CostTable[I].instcost * Quantity:9:2, Downtime_Credit:9:2,
2115I             (Quantity * CostTable[I].basemaint * Maint_Factor):9:2);
2116I End;   { Procedure PRINT_HW }
2117I
2118I
2119I PROCEDURE CONFIGURE_PROCESSING_SUBSYSTEM;
2120I
2121I Var
2122I    OSP : Integer;
2123I
2124I
2125I PROCEDURE COMPUTE_PROCESSORS;
2126I {*************************************************************************}
2127I {  This procedure outputs a series of screens prompting the user to pro-   }
2128I {  vide the necessary inputs required to generate the processor related    }
2129I {  data for the desired configuration.  Each input is checked to determine }
2130I {  whether OR not the response is positive OR within the necessary limits. }
2131I {*************************************************************************}
2132I
2133I Begin  { Procedure COMPUTE_PROCESSORS }
2134I    Quantity := Processors;
2135I    I := I + 1;                          { I=2  Processors on delivery order }
2136I    IF Quantity > 0 THEN PRINT_HW;
2137I    I := I + 1;                          { I=3 Uses # of Processors to determine
2138I                                           # extra 2MB memory modules to order }
2139I    IF Quantity > 0 THEN PRINT_HW;
2140I    IF (SiteInfo.siteno = 2) OR (SiteInfo.siteno = 3) THEN
2141I        Begin
2142I            I := I + 1;                  { I=4  Floating Point Arithmetic,
2143I                                                only ordered by FMSO sites }
2144I            IF Quantity > 0 THEN PRINT_HW;
2145I        End
2146I    ELSE I := I + 1;
2147I    { The following routine determines the number of OSPs to order. }
2148I    { One OSP is required per 16 Processors. }
2149I    I := I + 1;                          { I=5  OSP }
2150I    OSP := Processors;
```

```
2151I    WHILE OSP MOD 16 > 0 DO
2152I    OSP := OSP + 1;
2153I    Quantity := OSP DIV 16;
2154I    IF Quantity > 0 THEN PRINT_HW;
2155I End;   { Procedure COMPUTE_PROCESSORS }
2156I
2157I
2158I PROCEDURE COMPUTE_CRTS_PTRS;
2159I {*************************************************************************}
2160I {  This routine computes the number of Centronics Printers, CRTs and OSP   }
2161I {  interfaces required on the delivery order.                               }
2162I {*************************************************************************}
2163I
2164I Begin  {Procedeure COMPUTE_CRTS_PTRS }
2165I    Quantity := Printers;
2166I    I := I + 1;                          { I=6  Serial Printers }
2167I    IF Quantity > 0 THEN PRINT_HW;
2168I    Quantity := Crts;
2169I    I := I + 1;                          { I=7  Crts }
2170I    IF Quantity > 0 THEN PRINT_HW;
2171I    Quantity := OSP DIV 16;
2172I    I := I + 1;                          { I=8 Printer Interfaces for OSPs }
2173I    IF Quantity > 0 THEN PRINT_HW;
2174I End;   { Procedure COMPUTE_CRTS_PTRS }
2175I
2176I
2177I PROCEDURE COMPUTE_CABINETS;
2178I {*************************************************************************}
2179I {   The following routine estimates the number of Patch Panel Cabinets }
2180I {   and permits the user to increase this for reserve/expansion.       }
2181I {*************************************************************************}
2182I
2183I Var
2184I    Config16, Slots, Temp : Integer;
2185I
2186I
2187I Begin  { Procedure COMPUTE_CABINETS }
2188I    Temp := Processors;
2189I    {*****************************************************************}
2190I    {  Sufficient system cabinets to house the number of Processors?   }
2191I    {*****************************************************************}
2192I    WHILE (Temp MOD 4) > 0 DO
2193I          Temp := Temp + 1;
2194I    SysCab := Temp DIV 4;
2195I    IF (Processors > 0) AND (SysCab < 1) THEN
2196I        SysCab := 1;
2197I    { The following routine estimates the number of PatchPanel Cabinets }
2198I    IF SysCab = 1 THEN
2199I        PatchPanel := 1
2200I    ELSE IF SysCab = 0 THEN
```

```
2201I        PatchPanel := 0
2202I    Else IF SysCab > 1 THEN
2203I        PatchPanel := SysCab - 1;
2204I    { The following routine estimates the number of Expnasion Cabinets }
2205I    ExpanCab := 0;
2206I    Config16 := Processors DIV 16;
2207I    IF (Processors > (16 * Config16 + 4)) AND
2208I       (Processors < (16 * (Config16 + 1) + 5)) THEN
2209I                   ExpanCab := Config16 +1
2210I    ELSE ExpanCab := Config16;
2211I    IF (Processors > 4) AND (Processors < 21) THEN
2212I        ExpanCab := 1;
2213I    ADDITIONAL_CABINETS;
2214I    Slots := SysCab * 24;
2215I
2216I    { The following permits the user to increase the number of}
2217I    { Patch Panel Cabinets for reserve/expansion.     }
2218I    Quantity := PatchPanel + Add_PatchPanel;
2219I    I := I + 1;                          { I=9  Patch Panel Cabinets }
2220I    IF Quantity > 0 THEN PRINT_HW;
2221I
2222I    { The following permits the user to increase the number of }
2223I    { System Cabinets for reserve/expansion.  }
2224I    Quantity := SysCab + Add_System;
2225I    I := I + 1;                          { I=10  Systems Cabinets }
2226I    IF Quantity > 0 THEN PRINT_HW;
2227I    Quantity := 3 * (SysCab + Add_System); {3 I/O Power Modules/System Cabinet}
2228I    I := I + 1;                          { I=11  I/O Power Modules Only }
2229I    IF Quantity > 0 THEN PRINT_HW;
2230I
2231I    { The following permits the user to increase the number of}
2232I    { Expansion Cabinets for reserve/expansion.     }
2233I    Quantity := ExpanCab + Add_Expansion;
2234I    I := I + 1;                          { I=12  Expansion Cabinets }
2235I    IF Quantity > 0 THEN PRINT_HW;
2236I End;   { Procedure COMPUTE_CABINETS }
2237I
2238I
2239I Begin  { CONFIGURE_PROCESSING_SUBSYSTEM }
2240I    COMPUTE_PROCESSORS;
2241I    COMPUTE_CRTS_PTRS;
2242I    COMPUTE_CABINETS;
2243I End;   { CONFIGURE_PROCESSING_SUBSYSTEM }
2244I
2245I
2246I PROCEDURE CONFIGURE_STORAGE_SUBSYSTEM;
2247I
2248I
2249I PROCEDURE COMPUTE_DISK;
2250I
```

```
2251I
2252I Var
2253I    DiscCtrlr, DiscPatchPnl, THYPERPatchPnl  : Integer;
2254I
2255I {*************************************************************************}
2256I { The following procedures determine the number of discs, disc           }
2257I { controllers, disc patch panels, and Patch Panel Cabinets to be ordered }
2258I { The reason that PATCHPNL must be called, which includes THL and ASYNC/  }
2259I { SYNC routines, from the disc procedure is to maintain the NAVSUP        }
2260I { required delivery order sequence.  Discs are in even quantities due to  }
2261I { the "mirrored-disc" requirment in SPLICE.                               }
2262I {*************************************************************************}
2263I
2264I PROCEDURE COMPUTE_PATCH_PANELS;
2265I
2266I Begin  { Procedure COMPUTE_PATCH_PANELS }
2267I    DiscCtrlr := (D128MB + D240MB + D540MB) DIV 2;
2268I    IF (DiscCtrlr MOD 2) > 0 THEN DiscCtrlr := DiscCtrlr + 1;
2269I    Quantity := DiscCtrlr;
2270I    WHILE (Quantity MOD 4) > 0 DO
2271I        Quantity := Quantity + 1;
2272I    DiscPatchPnl := Quantity DIV 4;   { 4 disc controllers per Disc Patch Panel }
2273I    Quantity := DiscPatchPnl;
2274I    I := I + 1;                       { I=13  Disc Patch Panels }
2275I    IF Quantity > 0 THEN PRINT_HW;
2276I    I := I + 1;                       { I=14  TANDEM HYPER Link Patch Panels }
2277I    IF Stock_Point = 'S' THEN         { Is the site a Stock Point site? }
2278I        IF (THYPERchannels > 0) and (THYPERchannels < 5) THEN
2279I            Begin
2280I                Quantity := 1;
2281I                PRINT_HW;
2282I            End
2283I        ELSE
2284I            Begin
2285I                THYPERPatchPnl := THYPERchannels * 2;
2286I                WHILE (THYPERPatchPnl MOD 4) > 0 Do
2287I                    THYPERPatchPnl := THYPERPatchPnl + 1;
2288I                THYPERPatchPnl := THYPERPatchPnl DIV 4;
2289I                Quantity := THYPERPatchPnl DIV 4;
2290I                IF Quantity > 0 THEN PRINT_HW;
2291I            End;
2292I    Quantity := AsyncCtrl;
2293I    I := I + 1;                       { I=15  ASYNC Patch Panels }
2294I    IF Quantity > 0 THEN PRINT_HW;
2295I    I := I + 1;                       { I=16 SYNC Patch Panels}
2296I    IF Bytesync > 0 THEN
2297I        { Only BYTE SYNC lines require SYNC Patch Panels }
2298I        Begin
2299I            Quantity := Bytesync;
2300I            PRINT_HW;
```

```
2301I         End;
2302I End;  { Procedure COMPUTE_PATCH_PANELS }
2303I
2304I
2305I PROCEDURE COMPUTE_DISK_COMPONENTS;
2306I
2307I
2308I Begin  { Procedure COMPUTE_DISK_COMPONENTS }
2309I    Quantity := DiscCtrlr;
2310I    I := I + 1;                          { I=17 Disc Controllers }
2311I    IF Quantity > 0 THEN PRINT_HW;
2312I    Quantity := D128MB DIV 2;            { Two drawers in each 128MB drive }
2313I    I := I + 1;                          { I=18  1st Drawer of 128MB Discs }
2314I    IF Quantity > 0 THEN
2315I        Begin
2316I            PRINT_HW;
2317I            I := I + 1;                  { I=19  2nd Drawer of 128MB Discs }
2318I            PRINT_HW;
2319I        End
2320I    ELSE I := I + 1;
2321I    Quantity := D240MB;
2322I    I := I + 1;                          { I=20  240MB Discs }
2323I    IF Quantity > 0 THEN PRINT_HW;
2324I    Quantity := D540MB;
2325I    I := I + 1;                          { I=21  540MB Discs }
2326I    IF Quantity > 0 THEN PRINT_HW;
2327I End;   { Procedure COMPUTE_DISK_COMPONENTS }
2328I
2329I
2330I Begin  { Procedure COMPUTE_DISK }
2331I    COMPUTE_PATCH_PANELS;
2332I    COMPUTE_DISK_COMPONENTS;
2333I End;   { Procedure COMPUTE_DISK }
2334I
2335I
2336I PROCEDURE COMPUTE_TAPE;
2337I
2338I {************************************************************}
2339I {  This procedure determines the number of Tape Drives and Tape }
2340I {  Controllers to be output on the delivery order.            }
2341I {************************************************************}
2342I
2343I Begin { Procedure COMPUTE_TAPE }
2344I    Quantity := TapeDrv;
2345I    IF Quantity > 0 THEN
2346I        Begin
2347I            I := I + 1;                  { I=22  Tape Controllers }
2348I            PRINT_HW;
2349I            I := I + 1;                  { I=23  Tape Drives }
2350I            PRINT_HW;
```

```
2351I        End
2352I    ELSE I := I + 2;
2353I End; { Procedure COMPUTE_TAPE }
2354I
2355I
2356I Begin  { Procedure CONFIGURE_STORAGE_SUBSYSTEM }
2357I    COMPUTE_DISK;
2358I    COMPUTE_TAPE;
2359I End;   { Procedure CONFIGURE_STORAGE_SUBSYSTEM }
2360I
2361I
2362I PROCEDURE CONFIGURE_INPUT_OUTPUT_SUBSYSTEM;
2363I
2364I
2365I PROCEDURE COMPUTE_READER_PUNCHES;
2366I {*************************************************************************}
2367I {  This procedure determines the number of Reader/Punches and Card Readers }
2368I {  to be output on the delivery order.                                     }
2369I {*************************************************************************}
2370I
2371I Begin { Procedure COMPUTE_READER_PUNCHES }
2372I    Quantity := RdrPunch;
2373I    I := I + 1;                          { I=24  Card Reader/Punches }
2374I    IF Quantity > 0 THEN PRINT_HW;
2375I    Quantity := CardRdr;
2376I    I := I + 1;                          { I=25  Card Readers }
2377I    IF Quantity > 0 THEN PRINT_HW;
2378I End; { Procedure COMPUTE_READER_PUNCHES }
2379I
2380I
2381I PROCEDURE COMPUTE_LINE_PRINTERS;
2382I
2383I {*************************************************************************}
2384I { This procedure determines the number of 1000 LPM and 600 LPM Printers }
2385I { to be output on the delivery order.                                     }
2386I {*************************************************************************}
2387I
2388I Begin  { Procedure COMPUTE_LINE_PRINTERS }
2389I    Quantity := RdrPunch + CardRdr + LPM1000 + LPM600;
2390I    I := I + 1;                          { I=26  Line Ptr/Crd Rdr Ctrl }
2391I    IF Quantity > 0 THEN PRINT_HW;
2392I    Quantity := LPM1000;
2393I    I := I + 1;                          { I=27  1000 LPM Printers }
2394I    IF Quantity > 0 THEN PRINT_HW;
2395I    Quantity := LPM600;
2396I    I := I + 1;                          { I=28  600 LPM Printers }
2397I    IF Quantity > 0 THEN PRINT_HW;
2398I End; { Procedure COMPUTE_LINE_PRINTERS }
2399I
2400I
```

```
2401I Begin  { Procedure CONFIGURE_INPUT_OUTPUT_SUBSYSTEM }
2402I    COMPUTE_READER_PUNCHES;
2403I    COMPUTE_LINE_PRINTERS;
2404I End;   { Procedure CONFIGURE_INPUT_OUTPUT_SUBSYSTEM }
2405I
2406I
2407I PROCEDURE CONFIGURE_COMMUNICATIONS_SUBSYSTEM;
2408I
2409I
2410I PROCEDURE COMPUTE_FOX;
2411I {*************************************************************************}
2412I {  This procedure determines the number of FOX fibre optic controllers and }
2413I {  lines to be output on the delivery order.  FOX permits SPLICE nodes of  }
2414I {  16 OR less Processors (which are co-located within 1000 meters) to be   }
2415I {  directly interconnected.                                                }
2416I {*************************************************************************}
2417I
2418I Begin { Procedure COMPUTE_FOX }
2419I    I := I + 1;                          { I=29 Skips Interprocessor Bus }
2420I    IF Processors > 16 THEN
2421I        Begin
2422I            I := I + 1;                  { I=30  FOX CNTRLs for > 16 unit system }
2423I            Quantity := Processors;      { Processors > 16?  If so, order FOX }
2424I            WHILE Quantity MOD 16 > 0 DO
2425I                Quantity := Quantity + 1;
2426I            Quantity := Quantity DIV 16;
2427I            PRINT_HW;
2428I            I := I + 1;                  { I=31  FOX cables }
2429I            Quantity := Quantity - 1;
2430I            PRINT_HW;
2431I        End
2432I    ELSE I := I + 2;
2433I End; { Procedure COMPUTE_FOX }
2434I
2435I
2436I PROCEDURE COMPUTE_HYPERCHANNELS;
2437I
2438I {*************************************************************************}
2439I {  This procedure is called by COMPUTE_COMMUNICATION_SUBSYSTEM and   }
2440I {  is invoked only for the configuration of Stock Point Sites.  It   }
2441I {  uses the user inputs for HYPERchannel adapters and connections to }
2442I {  write out the correct HYPERchannel component site quantities on   }
2443I {  the delivery order.  Selected componets are written to disk via   }
2444I {  the PRINT_HW routine.                                             }
2445I {*************************************************************************}
2446I
2447I
2448I PROCEDURE EXTRA_HYPERCABINETS;
2449I
2450I Begin  { Procedure EXTRA_HYPERCABINETS }
```

```
2451I    Add_HYPERChannel := 0;
2452I    COLOR (15, 1);
2453I    GOTOXY (51, 16);
2454I    WRITE ('HYPERchannel');
2455I
2456I    screen_fieldSS := 1;
2457I    varSS := 1;
2458I    retrieveSS := False;
2459I    last_fieldSS := False;
2460I    retSS := '';
2461I
2462I    IF Stock_Point = 'S' THEN
2463I        GETINT(68,16,2,'N',HYPERCab,'##',0,16,retSS,False,14,1);
2464I
2465I    REPEAT { until answerSS = 'Y' }
2466I    { Display Items. Change retrieveSS to True and INPUT items}
2467I    REPEAT { until actionSS = exitSS }
2468I        IF Stock_Point = 'S' THEN
2469I            GETINT(75,16,2,'N',Add_HYPERchannel,'##',0,8,retSS,retrieveSS,14,1);
2470I
2471I        last_fieldSS := True;
2472I        RET_STATUS; { Check the code in "retSS". Set  "varSS" and "actionSS" }
2473I
2474I        { Check to see whether to switch retrieveSS to true }
2475I        IF last_fieldSS AND (not retrieveSS) THEN
2476I            Begin
2477I                retrieveSS := True;
2478I                last_fieldSS := False;
2479I                actionSS := staySS;
2480I                varSS := 1;
2481I            End
2482I        ELSE
2483I            last_fieldSS := False;
2484I    UNTIL actionSS = exitSS;
2485I    ACCEPT_INPUTS;
2486I    UNTIL answerSS = 'Y';
2487I End;    { Procedure EXTRA_HYPERCABINETS }
2488I
2489I
2490I Begin { Procedure COMPUTE_HYPERCHANNELS }
2491I    A400 := A400 + THYPERchannels;
2492I        { Stores all minicomputer HYPERchannel Adapter requirements }
2493I    Quantity := A400;
2494I    I := I + 1;                    { I=32  A400 - TANDEM HYPERChannel Adapters }
2495I    IF Quantity > 0 THEN PRINT_HW;
2496I    I := I + 1;            { I=33  2nd HYPERchannel Trunk Interface }
2497I    IF Trunks = 2 THEN
2498I        Begin
2499I            Quantity := 1;
2500I            PRINT_HW;
```

```
2501I       End;
2502I    HYPERCab := ((A400 DIV 2) + A150 + AXXX + A220 + A140 + A510) DIV 2;
2503I    EXTRA_HYPERCABINETS;
2504I    Quantity := HYPERCab + Add_HYPERChannel;
2505I
2506I    {*********************************************************************}
2507I    {  The above line determines the number of HYPERchannel cabinets to }
2508I    {  be estimated for the user.  It assumes that all TANDEM and P-E   }
2509I    {  HYPERchannels can reside in the same cabinet and that one cabinet}
2510I    {  for every two additional adapters will suffice.                   }
2511I    {*********************************************************************}
2512I
2513I    I := I + 1;                          { I=34 HYPERchannel Cabinets }
2514I    IF Quantity > 0 THEN PRINT_HW;
2515I    Quantity := THYPERchannels;
2516I    I := I + 1;                          { I=35  THL controllers }
2517I    IF Quantity > 0 THEN PRINT_HW;
2518I    Quantity := Trunks;                  { I=36 - 41  LCN Trunk Line }
2519I    If Trunks > 0 THEN
2520I       Begin
2521I            Case Cable_Distance of
2522I            'A':    Begin
2523I                         I := I + 1;            { I=36 < 500 ft }
2524I                         PRINT_HW;
2525I                         I := I + 5;
2526I                    End;
2527I            'B':    Begin
2528I                         I := I + 2;            { I=37 < 1000 ft }
2529I                         PRINT_HW;
2530I                         I := I + 4;
2531I                    End;
2532I            'C':    Begin
2533I                        I := I + 3;             { I=38 < 1500 ft }
2534I                        PRINT_HW;
2535I                        I := I + 3;
2536I                    End;
2537I            'D':    Begin
2538I                        I := I + 4;             { I=39 < 2500 ft }
2539I                        PRINT_HW;
2540I                        I := I + 2;
2541I                    End;
2542I            'E':    Begin
2543I                        I := I + 5;             { I=40 < 4000 ft }
2544I                        PRINT_HW;
2545I                        I := I + 1;
2546I                    End;
2547I            'F':    Begin
2548I                        I := I + 6;             { I=41 < 5000 ft }
2549I                        PRINT_HW;
2550I                    End;
```

```
2551I            End;
2552I        End
2553I    ELSE I := I + 6;
2554I    Quantity := A150;                    { A150 - B4800 HYPERchannel Adapter. }
2555I    I := I + 1;                          { I=42 HTC1A interfaces }
2556I    IF Quantity > 0 THEN PRINT_HW;
2557I    Quantity := AXXX;                    { AXXX - B4900 HYPERchannel Adapter. }
2558I    I := I + 1;                          { I=43  DLP interfaces }
2559I    IF Quantity > 0 THEN PRINT_HW;
2560I    Quantity := A150 + AXXX + A220;
2561I             { Burroughs & IBM hosts require ASCII to ECBDIC Conversion Board. }
2562I    I := I + 1;                          { I=44  ASCII to EBCDIC Conversion Board}
2563I    IF Quantity > 0 THEN PRINT_HW;
2564I    Quantity := A400 - THYPERchannels;   { P-E HYPERchannel Boards }
2565I    I := I + 1;                          { I=45  PI 40 Boards for P-E }
2566I    IF Quantity > 0 THEN PRINT_HW;
2567I    Quantity := A220;
2568I    I := I + 1;                          { I=46  IBM HYPERchannel Adapters }
2569I    IF Quantity > 0 THEN PRINT_HW;
2570I    Quantity := A140;
2571I    I := I + 1;                          { I=47  UNIVAC HYPERchannel Adapters }
2572I    IF Quantity > 0 THEN PRINT_HW;
2573I    Quantity := A510;
2574I    I := I + 1;                          { I=48  FIPS HYPERchannel Adapters }
2575I    IF Quantity > 0 THEN PRINT_HW;
2576I    I := I + 1;                          { I=49 Find out what line 420301
2577I                                              is and insert here }
2578I End; { Procedure COMPUTE_HYPERCHANNELS }
2579I
2580I
2581I PROCEDURE COMPUTE_TERMINAL_COMMUNICATIONS_COMPONENTS;
2582I
2583I Var
2584I    CableOpt, K : Integer;
2585I
2586I
2587I {*****************************************************************}
2588I {  This procedure is used to handle all SPLICE terminal oriented   }
2589I {  communications requirements.  PRINT_HW is called to write sel-  }
2590I {  ected components to the output file.                            }
2591I {*****************************************************************}
2592I
2593I Begin  { Procedure COMPUTE_TERMINAL_COMMUNICATIONS_COMPONENTS }
2594I    AsyncExtbd := AsyncCtrl * AsyncExtbd;
2595I    IF AsyncCtrl > 0 THEN
2596I        Begin
2597I            Quantity := AsyncCtrl;
2598I            I := I + 1;                  { I=50  ASYNC Controllers }
2599I            IF Quantity > 0 THEN PRINT_HW;
2600I            IF AsyncExtbd > 0 THEN
```

```
2601I                Begin
2602I                    Quantity := AsyncExtbd;
2603I                    I := I + 1;          { I=51  ASYNC Extension Boards }
2604I                    PRINT_HW;
2605I                End
2606I            Else I := I + 1;
2607I        End
2608I    Else I := I + 2;
2609I    I := I + 1;                          { I=52 Skips Auto Calling Unit Line Item }
2610I    K := (LIU -1) DIV 45;
2611I    Quantity := LIU;
2612I    IF LIU > 0 THEN
2613I        Begin
2614I            Quantity := K + 1;
2615I            I := I + 1;                  { I=53  6100 Comm Base }
2616I            PRINT_HW;
2617I            IF (LIU > 45*K) AND (LIU <= 45*K+15) THEN
2618I                Begin
2619I                    Quantity := 2*K;
2620I                    CableOpt := 6*K+2;
2621I                End;
2622I            IF (LIU > 45*K+15) AND (LIU <= 45*K+30) THEN
2623I                Begin
2624I                    Quantity := 2*K+1;
2625I                    CableOpt := 6*K+4;
2626I                End;
2627I            IF (LIU > 45*K+30) AND (LIU <= 45*(K+1)) THEN
2628I                Begin
2629I                    Quantity := 2*(K+1);
2630I                    CableOpt := 6*K+6;
2631I                End;
2632I            I := I + 1;                  { I=54  Base ADD-ONs }
2633I            PRINT_HW;
2634I            Quantity := LIU;
2635I            I := I + 1;                  { I=55  LIUs }
2636I            PRINT_HW;
2637I            Quantity := CableOpt;        { 6100 cables: 2 / base & 2 / add-on }
2638I            I := I + 2;                  { Skips 30M & 45M  cables }
2639I            I := I + 1;                  { I=58  6100 Cables }
2640I            IF Quantity > 0 THEN PRINT_HW;
2641I        End
2642I    Else I := I + 6;                     { Skips I=53-58 if no 6100 Controllers }
2643I    I := I + 1;                          { I=59  BIT SYNCH Controllers }
2644I    IF Bitsync > 0 THEN
2645I        Begin
2646I            Quantity := Bitsync;
2647I            PRINT_HW;
2648I        End;
2649I    I := I + 1;                          { I=60  BYTE SYNCH Controllers }
2650I    IF Bytesync > 0 THEN
```

```
2651I        Begin
2652I            Quantity := Bytesync;
2653I            PRINT_HW;
2654I        End;
2655I    I := I + 2;                          { Skips I=61-62; ARCLI items ordered}
2656I End;   { Procedure COMPUTE_TERMINAL_COMMUNICATIONS_COMPONENTS }
2657I
2658I
2659I Begin  { Procedure CONFIGURE_COMMUNICATIONS_SUBSYSTEM }
2660I    COMPUTE_FOX;
2661I    IF Stock_Point = 'S' THEN COMPUTE_HYPERCHANNELS
2662I    Else I := I + 18;
2663I    COMPUTE_TERMINAL_COMMUNICATIONS_COMPONENTS;
2664I End;   { Procedure CONFIGURE_COMMUNICATIONS_SUBSYSTEM }
2665I
2666I
2667I Begin  { Procedure CONFIGURE_HARDWARE }
2668I    INITIALIZE_HARDWARE_INPUTS;
2669I    GET_HARDWARE_INPUTS;
2670I    CONFIGURE_PROCESSING_SUBSYSTEM;
2671I    CONFIGURE_STORAGE_SUBSYSTEM;
2672I    CONFIGURE_INPUT_OUTPUT_SUBSYSTEM;
2673I    CONFIGURE_COMMUNICATIONS_SUBSYSTEM;
2674I    COMPUTE_SECTION_TOTALS ('Software');
2675I    Mode := Soft;
2676I End;   { Procedure CONFIGURE_HARDWARE }
2677I
2678I
2679I PROCEDURE CONFIGURE_SOFTWARE;
2680I
2681I
2682I Var
2683I    { Variables Section For C:SOFTWARE }
2684I    SW6100 : Char;
2685I    ADCCP_6100, ATP_6100, BSC_6100, SNAX_6100, TINET_6100, AM_6520 : String [1];
2686I    DDN, FDC_DLANet, FDC_SNA, NMF_Performance                      : String [1];
2687I    NMF_Accounting, NMF_Base_Facility, NMF_Diagnostics, NMF_Group  : String [1];
2688I    POLL_SELECT, FILE_SECURITY, LCN_FUP, T_TEXT, TR_3271           : String [1];
2689I    NETEX_Months, SPLICENet_Months : Integer;
2690I
2691I
2692I {*****************************************************************}
2693I {  This procedure is used to determine the software requirements for }
2694I {  the delivery order.  Please see the rules in the Programmer Main- }
2695I {  tenance Manual to determine which packages are ordered PER       }
2696I {  PROCESSOR, PER SITE, and PER PROCESSOR USED.  ALL software       }
2697I {  maintenace is PER SITE.  Various discount/escalations apply to   }
2698I {  the software packages.  See the BUILD_COST_TABLE procedure for   }
2699I {  specific factors and how they are incorporated into the COSTTABLE }
2700I {  array.                                                          }
```

```
2701I {*****************************************************************}
2702I
2703I
2704I PROCEDURE INITIALIZE_SOFTWARE_INPUTS;
2705I
2706I
2707I Begin  { Procedure INITIALIZE_SOFTWARE_INPUTS }
2708I    { Initialize Variables To Default Values }
2709I    ADCCP_6100 := 'N';
2710I    AM_6520 := 'Y';
2711I    ATP_6100 := 'Y';
2712I    BSC_6100 := 'N';
2713I    DDN := 'N';
2714I    FDC_DLANet := 'N';
2715I    FDC_SNA := 'Y';
2716I    FILE_SECURITY := 'N';
2717I    LCN_FUP := 'N';
2718I    NETEX_Months := 0;
2719I    NMF_Accounting := 'N';
2720I    NMF_Base_Facility := 'N';
2721I    NMF_Diagnostics := 'N';
2722I    NMF_Group := 'N';
2723I    NMF_Performance := 'N';
2724I    POLL_SELECT := 'Y';
2725I    SNAX_6100 := 'Y';
2726I    SPLICENet_Months := 0;
2727I    T_TEXT := 'Y';
2728I    TINET_6100 := 'N';
2729I    TR_3271 := 'N';
2730I End;   { Procedure INITIALIZE_SOFTWARE_INPUTS }
2731I
2732I
2733I PROCEDURE GET_SOFTWARE_INPUTS;
2734I
2735I Begin
2736I    screen_fieldSS := 21;
2737I    varSS := 1;
2738I    retrieveSS := False;
2739I    last_fieldSS := False;
2740I    DISPLAY_SCREEN (Screenfile);        { Display Screen }
2741I
2742I    REPEAT { until answerSS = 'Y' }
2743I    { Display Items. Change retrieveSS to True and INPUT items}
2744I    REPEAT { until actionSS = exitSS }
2745I        CASE varSS of
2746I          1:  GETITEM(36,5,1,'Y',FILE_SECURITY,'U','','',retSS,retrieveSS,15,1);
2747I          2:  IF Stock_Point = 'S' THEN
2748I                  GETITEM(36,6,1,'Y',LCN_FUP,'U','','',retSS,retrieveSS,15,1);
2749I          3:  GETITEM(36,8,1,'Y',ATP_6100,'U','','',retSS,retrieveSS,15,1);
2750I          4:  GETITEM(36,9,1,'Y',BSC_6100,'U','','',retSS,retrieveSS,15,1);
```

```
2751I          5:  GETITEM(36,10,1,'Y',ADCCP_6100,'U','','',retSS,retrieveSS,15,1);
2752I          6:  GETITEM(36,11,1,'Y',POLL_SELECT,'U','','',retSS,retrieveSS,15,1);
2753I          7:  GETITEM(36,12,1,'Y',SNAX_6100,'U','','',retSS,retrieveSS,15,1);
2754I          8:  GETITEM(36,13,1,'Y',TINET_6100,'U','','',retSS,retrieveSS,15,1);
2755I          9:  GETITEM(36,14,1,'Y',TR_3271,'U','','',retSS,retrieveSS,15,1);
2756I         10:  GETITEM(36,15,1,'Y',AM_6520,'U','','',retSS,retrieveSS,15,1);
2757I         11:  GETITEM(36,16,1,'Y',T_TEXT,'U','','',retSS,retrieveSS,15,1);
2758I         12:  GETITEM(74,5,1,'Y',FDC_SNA,'U','','',retSS,retrieveSS,15,1);
2759I         13:  GETITEM(74,6,1,'Y',FDC_DLANet,'U','','',retSS,retrieveSS,15,1);
2760I         14:  GETITEM(74,7,1,'Y',DDN,'U','','',retSS,retrieveSS,15,1);
2761I         15:  GETITEM(74,9,1,'Y',NMF_Group,'U','','',retSS,retrieveSS,15,1);
2762I         16:  IF NMF_Group = 'N' THEN
2763I                 GETITEM(74,12,1,'Y',NMF_Base_Facility,
2764I                  'U','','',retSS,retrieveSS,15,1);
2765I         17:  IF NMF_Group = 'N' THEN
2766I                 GETITEM(74,13,1,'Y',NMF_Performance,
2767I                  'U','','',retSS,retrieveSS,15,1);
2768I         18:  IF NMF_Group = 'N' THEN
2769I                 GETITEM(74,14,1,'Y',NMF_Diagnostics,
2770I                  'U','','',retSS,retrieveSS,15,1);
2771I         19:  IF NMF_Group = 'N' THEN
2772I                 GETITEM(74,15,1,'Y',NMF_Accounting,
2773I                  'U','','',retSS,retrieveSS,15,1);
2774I         20:  IF Stock_Point = 'S' THEN
2775I                 GETINT(60,21,2,'N',NETEX_Months,
2776I                  '##',0,12,retSS,retrieveSS,15,1);
2777I         21:  GETINT(60,22,2,'N',SPLICENeT_Months,'##',0,12,retSS,retrieveSS,15,1);
2778I        End; { CASE }
2779I
2780I        IF varSS = screen_fieldSS THEN last_fieldSS:=True;
2781I        RET_STATUS; { Check the code in "retSS". Set  "varSS" and "actionSS" }
2782I
2783I        { Check to see whether to switch retrieveSS to true }
2784I        IF last_fieldSS AND (not retrieveSS) THEN
2785I            Begin
2786I                retrieveSS := True;
2787I                last_fieldSS := False;
2788I                actionSS := staySS;
2789I                varSS := 1;
2790I            End
2791I        ELSE
2792I            last_fieldSS := False;
2793I    UNTIL actionSS=exitSS;
2794I    ACCEPT_INPUTS;
2795I    UNTIL answerSS = 'Y';
2796I End;   { Procedure GET_SOFTWARE_INPUTS }
2797I
2798I
2799I PROCEDURE PRINT_SW (Type_Software : Integer);
2800I {*************************************************************************}
```

```
2801I {  used in any maintenance computations.                                }
2802I {*******************************************************************************}
2803I
2804I Begin { Procedure PRINT_SW }
2805I    CASE Type_Software of
2806I        1:  Begin   { Per Processor Basis }
2807I                Maint_Factor := Momaint_Esc_Rate;
2808I                Extended_Price := Quantity * CostTable[I].purchprice;
2809I            End;
2810I        2:  Begin   { Per Site Basis }
2811I                Maint_Factor := Momaint_Esc_Rate;
2812I                Extended_Price := CostTable[I].purchprice;
2813I            End;
2814I        3:  Begin   { Per Processor Basis }
2815I                Maint_Factor := 1;
2816I                Extended_Price := Quantity * CostTable[I].purchprice;
2817I            End;
2818I    End;    { End of CASE Statement }
2819I    LINE_SETUP;
2820I        {*************************************************************}
2821I        {  Compute System Downtime Credit Component Factor per month   }
2822I        {*************************************************************}
2823I    System_Downtime_Component := System_Downtime_Component +
2824I                                 (Quantity * CostTable[I].basemaint
2825I                                 * Maint_Factor);
2826I        {*******************************************************}
2827I        {  Compute the Component Downtime Credit Factor per hour  }
2828I        {*******************************************************}
2829I    Downtime_Credit := (((CostTable[I].purchprice + CostTable[I].instcost) / 48)
2830I                        + (CostTable[I].basemaint * Maint_factor)) * 0.005;
2831I    WRITELN (Diskfile, '"', Line_Number:7, '" "', CostTable[I].featureno:8,
2832I             '" "', CostTable[I].descript:28, '"', Quantity:3,
2833I             CostTable[I].purchprice:13:2, Extended_Price:12:2,
2834I             CostTable[I].basemaint:9:2, Maint_Factor:8:3, Maint_Months:5,
2835I             CostTable[I].basemaint * Maint_Factor * Maint_Months:12:2,
2836I             CostTable[I].instcost:8:2,
2837I             CostTable[I].instcost * Quantity:9:2, Downtime_Credit:9:2,
2838I             (Quantity * CostTable[I].basemaint * Maint_Factor):9:2);
2839I End;   { Procedure PRINT_SW }
2840I
2841I
2842I PROCEDURE COMPUTE_PROCESSOR_SOFTWARE;
2843I
2844I Begin  { Procedure COMPUTE_PROCESSOR_SOFTWARE }
2845I    Quantity := Processors;              { PER-PROCESSOR SOFTWARE }
2846I    IF Quantity > 0 THEN
2847I        Begin
2848I            I := I + 1;                  { I=63  GUARDIAN }
2849I            PRINT_SW (1);                { PER-PROCESSOR SOFTWARE }
2850I            I := I + 1;                  { I=64  BATCH }
```

```
2851I            PRINT_SW (2);                { PER-SITE SOFTWARE }
2852I            I := I + 1;                  { I=65  System Utilities }
2853I            PRINT_SW (2);                { PER-SITE SOFTWARE }
2854I            I := I + 1;                  { I=66  ENCOMPASS }
2855I            PRINT_SW (1);                { PER-PROCESSOR SOFTWARE }
2856I            I := I + 5;                  { Skips 5 p/o software packages }
2857I            I := I + 1;                  { I=72  TPS Software }
2858I            PRINT_SW (2);                { PER-SITE SOFTWARE }
2859I            I := I + 5;                  { Skips 5 p/o software packages }
2860I        End
2861I    ELSE I := I + 15;
2862I    I := I + 1;                          { I=78 File Security Software }
2863I    IF File_Security = 'Y' THEN PRINT_SW (2);
2864I    I := I + 1;                          { I=79 Card Reader Software }
2865I                                         { PER-SITE SOFTWARE }
2866I    IF CardRdr > 0 THEN PRINT_SW (2);
2867I    I := I + 3;                          { Skips 3 p/o software packages }
2868I End;   { Procedure COMPUTE_PROCESSOR_SOFTWARE }
2869I
2870I
2871I PROCEDURE COMPUTE_COMMUNICATIONS_SOFTWARE;
2872I
2873I Var
2874I    Temp_Months : Integer;
2875I
2876I
2877I PROCEDURE COMPUTE_TANDEM_SOFTWARE;
2878I
2879I Begin  { Procedure COMPUTE_TANDEM_SOFTWARE }
2880I    Quantity := Processors;
2881I    IF Quantity > 0 THEN
2882I        Begin
2883I            I := I + 1;                  { I=83  EXPAND Software }
2884I            PRINT_SW (1);                { PER-PROCESSOR SOFTWARE }
2885I            I := I + 1;                  { I=84 Skips Exchange RJE Software }
2886I {  Possibly need to add choices to software screen for next two items  }
2887I            I := I + 1;                  { I=85  AM 3270 Software }
2888I            PRINT_SW (1);                { PER-PROCESSOR SOFTWARE }
2889I            I := I + 1;                  { I=86  X.25 ACCESS Software }
2890I            PRINT_SW (1);                { PER-PROCESSOR SOFTWARE }
2891I        End
2892I    ELSE I := I + 4;
2893I    I := I + 1;                          { Skips I=87 HYPERLINK Access Method S/W}
2894I    I := I + 1;                          { I=88  LCN_FUP}
2895I    IF (SiteInfo.site_type = 'S') AND (LCN_FUP = 'Y') THEN
2896I        PRINT_SW (2);
2897I    I := I + 1;                          { I=89  Skip GFE Terminal Support }
2898I    I := I + 1;                          { I=90  ATP 6100 }
2899I    IF ATP_6100 = 'Y' THEN PRINT_SW (1);
2900I    I := I + 1;                          { I=91  BSC 6100 }
```

```
2901I    IF BSC_6100 = 'Y' THEN PRINT_SW (1);
2902I    I := I + 1;                          ( I=92  ADCCP 6100 }
2903I    IF ADCCP_6100 = 'Y' THEN PRINT_SW (1);
2904I    I := I + 1;                          ( I=93  TINET 6100 }
2905I    IF TINET_6100 = 'Y' THEN PRINT_SW (1);
2906I    I := I + 1;                          ( I=94  BURROUGHS POLL-SELECT }
2907I    IF POLL_SELECT = 'Y' THEN PRINT_SW (1);
2908I    I := I + 1;                          { I=95  SNAX 6100 }
2909I    IF SNAX_6100 = 'Y' THEN PRINT_SW (1);
2910I    I := I + 1;                          ( I=96  TR 3271 }
2911I    IF TR_3271 = 'Y' THEN PRINT_SW (1);
2912I    I := I + 1;                          { I=97  AM 6520 }
2913I    IF AM_6520 = 'Y' THEN PRINT_SW (1);
2914I    I := I + 1;                          ( I=98  FDC SNA Interface Package }
2915I    IF FDC_SNA = 'Y' THEN PRINT_SW (2); ( PER-SITE SOFTWARE }
2916I    I := I + 1;                          ( I=99  FDC DLANet Interface Package }
2917I    IF FDC_DLANet = 'Y' THEN PRINT_SW (2); ( PER-SITE SOFTWARE }
2918I End;   ( Procedure COMPUTE_TANDEM_SOFTWARE }
2919I
2920I
2921I PROCEDURE COMPUTE_HYPERCHANNEL_SOFTWARE;
2922I
2923I Begin  ( Procedure COMPUTE_HYPERCHANNEL_SOFTWARE }
2924I    I := I + 1;                          { I=100  HTC1A NETEX Software }
2925I    Temp_Months := Maint_Months;
2926I    Maint_Months := NETEX_Months;
2927I    IF (SiteInfo.site_type = 'S') AND (A150 > 0) THEN
2928I        Begin
2929I            Quantity := A150;
2930I            PRINT_SW (3);
2931I            I := I + 2;                  { I=102  CIP, BUROUGHS HTC }
2932I            Quantity := 1;
2933I            Maint_Months := SPLICENet_Months;
2934I            PRINT_SW (2);
2935I        End
2936I    Else I := I + 2;
2937I    Maint_Months := NETEX_Months;
2938I    I := I + 1;                          { I=103  Burroughs DLP NETEX S/W }
2939I    IF (SiteInfo.site_type = 'S') AND (AXXX > 0) THEN
2940I        Begin
2941I            Quantity := AXXX;
2942I            PRINT_SW (3);
2943I            I := I + 2;                  { I=105  DLP Presentation Level S/W }
2944I            Quantity := 1;
2945I            Maint_Months := SPLICENet_Months;
2946I            PRINT_SW (2);
2947I        End
2948I    Else I := I + 2;
2949I    Maint_Months := NETEX_Months;
2950I    I := I + 1;                          { I=106  PE NETEX Software }
```

```
2951I    IF (SiteInfo.site_type = 'S') AND ((A400 - THYPERchannels)  > 0) THEN
2952I        Begin
2953I            Quantity := (A400 - THYPERchannels);
2954I            PRINT_SW (3);
2955I            I := I + 2;                    { I=108  CIP, PERKIN-ELMER }
2956I            Quantity := 1;
2957I            Maint_Months := SPLICENet_Months;
2958I            PRINT_SW (2);
2959I        End
2960I    Else I := I + 2;
2961I    Maint_Months := NETEX_Months;
2962I    I := I + 1;                            { I=109  IBM NETEX Software }
2963I    IF (SiteInfo.site_type = 'S') AND (A220  > 0) THEN
2964I        Begin
2965I            Quantity := A220;
2966I            PRINT_SW (3);
2967I            I := I + 2;                    { I=111  CIP, IBM MVS }
2968I            Quantity := 1;
2969I            Maint_Months := SPLICENet_Months;
2970I            PRINT_SW (2);
2971I        End
2972I    Else I := I + 2;
2973I    Maint_Months := NETEX_Months;
2974I    I := I + 1;                            { I=112  UNIVAC NETEX Software }
2975I    IF (SiteInfo.site_type = 'S') AND (A140  > 0) THEN
2976I        Begin
2977I            Quantity := A140;
2978I            PRINT_SW (3);
2979I            I := I + 2;                    { I=114  CIP, UNIVAC }
2980I            Quantity := 1;
2981I            Maint_Months := SPLICENet_Months;
2982I            PRINT_SW (2);
2983I        End
2984I    Else I := I + 2;
2985I    Maint_Months := NETEX_Months;
2986I    I := I + 1;                            { I=115  TANDEM NETEX Software }
2987I    IF (SiteInfo.site_type = 'S') AND  (THYPERchannels  > 0) THEN
2988I        Begin
2989I            Quantity := THYPERchannels;
2990I            PRINT_SW (3);
2991I        End;
2992I    I := I + 2;                            { I=117  CCP, TANDEM }
2993I    Quantity := 1;
2994I    Maint_Months := SPLICENet_Months;
2995I    PRINT_SW (2);
2996I    I := I + 1;                            { I=118  CEM, TANDEM }
2997I    PRINT_SW (2);
2998I End;   { Procedure COMPUTE_HYPERCHANNEL_SOFTWARE }
2999I
3000I
```

```
3001I PROCEDURE COMPUTE_DDN_SOFTWARE;
3002I
3003I Begin  { Procedure COMPUTE_DDN_SOFTWARE }
3004I    I := I + 2;                          { SKIPS TWO OLD DDN PACKAGES }
3005I    Quantity := PROCESSORS;              { PER-PROCESSOR SOFTWARE }
3006I    Maint_Months := SPLICENet_Months;
3007I    I := I + 1;                          { I=121  DDN I/F Protocol Software }
3008I    IF DDN = 'Y' THEN PRINT_SW (2);      { PER-SITE SOFTWARE }
3009I    Maint_Months := Temp_Months;
3010I    I := I + 1;                          { I=122  NETWORK MGT FACILITY GROUP }
3011I    IF NMF_Group = 'Y' THEN PRINT_SW (2);
3012I    I := I + 1;                          { I=123  NMF BASE FACILITY}
3013I    IF NMF_Base_Facility = 'Y' THEN PRINT_SW (2);
3014I    I := I + 1;                          { I=124  NMF PERFORMANCE MONITORING }
3015I    IF NMF_Performance = 'Y'THEN PRINT_SW (2);
3016I    I := I + 1;                          { I=125  NMF DIAGNOSTIC MONITORING }
3017I    IF NMF_Diagnostics = 'Y' THEN PRINT_SW (2);
3018I    I := I + 1;                          { I=126  NMF ACCOUNTING APPLICATION }
3019I    IF NMF_Accounting = 'Y' THEN PRINT_SW (2);
3020I    Quantity := Processors;
3021I    I := I + 2;                          { Skips 2 p/o software packages }
3022I End;   { Procedure COMPUTE_DDN_SOFTWARE }
3023I
3024I Begin  { Procedure COMPUTE_COMMUNICATIONS_SOFTWARE }
3025I    COMPUTE_TANDEM_SOFTWARE;
3026I    COMPUTE_HYPERCHANNEL_SOFTWARE;
3027I    COMPUTE_DDN_SOFTWARE;
3028I End;   { Procedure COMPUTE_COMMUNICATIONS_SOFTWARE }
3029I
3030I
3031I PROCEDURE COMPUTE_UTILITY_SOFTWARE;
3032I
3033I Begin  { Procedure COMPUTE_UTILITY_SOFTWARE }
3034I    I := I + 1;                          { I=129  File Comparison Utility S/W }
3035I    IF Processors > 0 THEN PRINT_SW (2);{ PER-SITE SOFTWARE }
3036I    Quantity := Processors;
3037I    I := I + 1;                          { I=130  COBOL Software }
3038I    IF Processors > 0 THEN PRINT_SW (1);{ PER-PROCESSOR SOFTWARE }
3039I    I := I + 1;                          { Skips 1 p/o software package }
3040I    IF (SiteInfo.siteno = 2) OR (SiteInfo.siteno = 3) THEN
3041I        Begin
3042I            I := I + 1;                  { I=132  PASCAL Software }
3043I            IF Quantity > 0 THEN PRINT_SW (1); { PER-PROCESSOR SOFTWARE }
3044I        End
3045I    Else I := I + 1;
3046I    IF (SiteInfo.siteno = 2) OR (SiteInfo.siteno = 3) THEN
3047I        Begin
3048I            I := I + 1;                  { I=133  FORTRAN Software }
3049I            IF Processors > 0 THEN PRINT_SW (1);  { PER-PROCESSOR SOFTWARE }
3050I        End
```

```
3051I    Else I := I + 1;
3052I    I := I + 15;                          { Skips 15 p/o software packages. }
3053I    I := I + 1;                           { I=149  TRANSFER }
3054I    IF Processors > 0 THEN PRINT_SW (1);{ PER-PROCESSOR Software }
3055I    I := I + 1;                           { I=150  T-TEXT Software }
3056I    IF (T_TEXT = 'Y') AND (Processors > 0) THEN PRINT_SW (2);
3057I    I := I + 2;                           { Skips two 1 time charge FMSO pkgs }
3058I End;   { Procedure COMPUTE_UTILITY_SOFTWARE }
3059I
3060I Begin  { Procedure CONFIGURE_SOFTWARE }
3061I    INITIALIZE_SOFTWARE_INPUTS;
3062I    GET_SOFTWARE_INPUTS;
3063I    COMPUTE_PROCESSOR_SOFTWARE;
3064I    COMPUTE_COMMUNICATIONS_SOFTWARE;
3065I    COMPUTE_UTILITY_SOFTWARE;
3066I    COMPUTE_SECTION_TOTALS ('Documentation');
3067I    Mode := Document;
3068I End;   { PROCEDURE CONFIGURE_SOFTWARE }
3069I
3070I
3071I PROCEDURE INITIALIZE_LAST_SCREEN_DATA;
3072I
3073I Begin  { Procedure INITIALIZE_LAST_SCREEN_DATA }
3074I    { Initialize Variables To Default Values }
3075I    Computer_Ops := 0;
3076I    Data_Communication := 0;
3077I    Hardware_Manual := 0;
3078I    Hardware_Overview := 0;
3079I    Operator_Training := 0;
3080I    Per_Call_Months := 3;
3081I    Programmer_Ref := 0;
3082I    Site_Preps := 'N';
3083I    SPLICENet_Workshop := 0;
3084I    Sys_Programmer := 0;
3085I    Sys_Resource := 0;
3086I    Sys_Tuning_Xray := 0;
3087I    TAL := 0;
3088I    Training_Group := 5;
3089I End;   { Procedure INITIALIZE_LAST_SCREEN_DATA }
3090I
3091I
3092I PROCEDURE GET_LAST_SCREEN_DATA;
3093I
3094I Begin  { Procedure GET_LAST_SCREEN_DATA }
3095I    screen_fieldSS := 14;
3096I    varSS := 1;
3097I    retrieveSS := False;
3098I    last_fieldSS := False;
3099I    DISPLAY_SCREEN (Screenfile);          { Display Screen }
3100I
```

```
3101I    REPEAT { until answerSS = 'Y' }
3102I    { Display Items. Change retrieveSS to True and INPUT items}
3103I    REPEAT { until actionSS = exitSS }
3104I        CASE varSS of
3105I         1:  GETINT(35,5,2,'N',Computer_Ops,'##',0,20,retSS,retrieveSS,15,1);
3106I         2:  GETINT(35,7,2,'N',Programmer_Ref,'##',0,20,retSS,retrieveSS,15,1);
3107I         3:  GETINT(35,9,2,'N',Hardware_Manual,'##',0,20,retSS,retrieveSS,15,1);
3108I         4:  GETINT(35,11,2,'N',Sys_Programmer,'##',0,20,retSS,retrieveSS,15,1);
3109I         5:  GETINT(70,5,1,'N',Training_Group,'#',1,5,retSS,retrieveSS,15,1);
3110I         6:  GETINT(75,10,2,'N',Operator_Training,'##',0,20,retSS,retrieveSS,15,1);
3111I         7:  GETINT(75,11,2,'N',Hardware_Overview,'##',0,20,retSS,retrieveSS,15,1);
3112I         8:  GETINT(75,12,2,'N',Sys_Resource,'##',0,20,retSS,retrieveSS,15,1);
3113I         9:  GETINT(75,13,2,'N',Sys_Tuning_Xray,'##',0,20,retSS,retrieveSS,15,1);
3114I        10:  GETINT(75,14,2,'N',Data_Communication,'##',0,20,retSS,retrieveSS,15,1);
3115I        11:  GETINT(75,15,2,'N',TAL,'##',0,20,retSS,retrieveSS,15,1);
3116I        12:  GETINT(75,16,2,'N',SPLICENet_Workshop,'##',0,20,retSS,retrieveSS,15,1);
3117I        13:  GETINT(35,23,2,'N',Per_Call_Months,'##',0,12,retSS,retrieveSS,15,1);
3118I        14:  GETITEM(75,23,1,'Y',Site_Preps,'U','','',retSS,retrieveSS,15,1);
3119I        End; { CASE }
3120I
3121I        IF varSS = screen_fieldSS THEN last_fieldSS := True;
3122I        RET_STATUS; { Check code in "retSS". Set  "varSS" and "actionSS" }
3123I
3124I        { Check to see whether to switch retrieveSS to true }
3125I        IF last_fieldSS AND (not retrieveSS) THEN
3126I            Begin
3127I                retrieveSS := True;
3128I                last_fieldSS := False;
3129I                actionSS := staySS;
3130I                varSS := 1;
3131I            End
3132I        ELSE
3133I            last_fieldSS := False;
3134I    UNTIL actionSS=exitSS;
3135I    ACCEPT_INPUTS;
3136I    UNTIL answerSS = 'Y';
3137I End;    { Procedure GET_LAST_SCREEN_DATA }
3138I
3139I
3140I PROCEDURE CONFIGURE_DOCUMENTATION;
3141I
3142I {*********************************************************************}
3143I {  This procedure simply uses the repetitive terminal out procedure  }
3144I {  MANUAL to list the 4 categories of manuals for the user and asks  }
3145I {  how many of each should be output on the delivery order.  Outputs }
3146I {  are written to disk via the PRINT_DOC_or_TRNG procedure,          }
3147I {  described above.  Uses WRITE_A_LINE for actual writes to disk.    }
3148I {*********************************************************************}
3149I
3150I
```

```
3151I Begin  { Procedure CONFIGURE_DOCUMENTATION }
3152I    I := I + 1;                          { I=153 Computer Operations Manual }
3153I    Quantity := Computer_Ops;
3154I    IF Quantity > 0 THEN PRINT_DOC_OR_TRNG;
3155I    I := I + 1;                          { I=154 Systems Programmer Manual }
3156I    Quantity := Sys_Programmer;
3157I    IF Quantity > 0 THEN PRINT_DOC_OR_TRNG;
3158I    I := I + 1;                          { I=155 Hardware Manual }
3159I    Quantity := Hardware_Manual;
3160I    IF Quantity > 0 THEN PRINT_DOC_OR_TRNG;
3161I    I := I + 1;                          { I=156 Programmer Reference Manual }
3162I    Quantity := Programmer_Ref;
3163I    IF Quantity > 0 THEN PRINT_DOC_OR_TRNG;
3164I    COMPUTE_SECTION_TOTALS ('Training');
3165I    Mode := Train;
3166I End;   { Procedure CONFIGURE_DOCUMENTATION }
3167I
3168I
3169I PROCEDURE CONFIGURE_TRAINING;
3170I
3171I {*********************************************************************}
3172I {  This procedure simply uses the repetitive terminal out procedures }
3173I {  GROUPS and COURSE to list the 7 categories of courses for the     }
3174I {  user and asks which/how many of each should be output on the      }
3175I {  delivery order.  Outputs are written to disk via the .            }
3176I {  PRINT_DOC_or_TRNG procedure, described above.  Uses WRITE_A_LINE  }
3177I {  for actual writes to disk.                                        }
3178I {*********************************************************************}
3179I
3180I Begin  { Procedure CONFIGURE_TRAINING }
3181I    Case Training_Group of
3182I        1:  Begin
3183I                I := I + 1;              { I=157 Training Group I }
3184I                Quantity := 1;
3185I                PRINT_DOC_or_TRNG;
3186I                I := I + 3;
3187I            End;
3188I        2:  Begin
3189I                I := I + 2;              { I=158  Training Group II }
3190I                Quantity := 1;
3191I                PRINT_DOC_or_TRNG;
3192I                I := I + 2;
3193I            End;
3194I        3:  Begin
3195I                I := I + 3;              { I=159  Training Group III }
3196I                Quantity := 1;
3197I                PRINT_DOC_or_TRNG;
3198I                I := I + 1;
3199I            End;
3200I        4:  Begin
```

```
3201I                I := I + 4;              { I=160  Training Group IV }
3202I                Quantity:= 1;
3203I                PRINT_DOC_or_TRNG;
3204I             End;
3205I          5:  I := I + 4;
3206I
3207I     End;
3208I     I := I + 1;                         { I=161 Operator Training Course }
3209I     Quantity := Operator_Training;
3210I     IF Operator_Training > 0 THEN PRINT_DOC_or_TRNG;
3211I     I := I + 1;                         { I=162 Hardware Overview Course }
3212I     Quantity := Hardware_Overview;
3213I     IF Hardware_Overview > 0 THEN PRINT_DOC_or_TRNG;
3214I     I := I + 1;                         { I=163 System Resource Mgmt Course }
3215I     Quantity := Sys_Resource;
3216I     IF Sys_Resource > 0 THEN PRINT_DOC_or_TRNG;
3217I     I := I + 1;                         { I=164 Systems Tuning and XRAY Course }
3218I     Quantity := Sys_Tuning_Xray;
3219I     IF Sys_Tuning_Xray > 0 THEN PRINT_DOC_or_TRNG;
3220I     I := I + 1;                         { I=165 Data Communications Course }
3221I     Quantity := Data_Communication;
3222I     IF Data_Communication > 0 THEN PRINT_DOC_or_TRNG;
3223I     I := I + 1;                         { I=166 TANDEM Application Lang Course }
3224I     Quantity := TAL;
3225I     IF TAL > 0 THEN PRINT_DOC_or_TRNG;
3226I     I := I + 1;                         { I=167 SPLICENet WKSHOP }
3227I     Quantity := SPLICENet_Workshop;
3228I     IF SPLICENet_Workshop > 0 THEN PRINT_DOC_or_TRNG;
3229I     COMPUTE_SECTION_TOTALS ('Maintenance');
3230I     Mode := Maint;
3231I End;   { Procedure CONFIGURE_TRAINING }
3232I
3233I
3234I PROCEDURE CONFIGURE_MAINTENANCE;
3235I
3236I {*********************************************************************}
3237I {  This procedure is used to write-out the three lines required on    }
3238I {  delivery orders for maintenance.  Both PM On-Call and On-Call are }
3239I {  written out with Quantity = 1 and all remaining items = 0.  The   }
3240I {  Maint_Months of Emergency Maintenance are loaded into Quantity    }
3241I {  field of the output, multipled by the updated emergency           }
3242I {  maintenance rate and then written to disk.  The applicable        }
3243I {  uplift rate is written out.  All other fields are = 0.            }
3244I {*********************************************************************}
3245I
3246I
3247I PROCEDURE PRINT_MAINT;
3248I {*************************************************************}
3249I {  Sets Parameters for the three categories to be output on the  }
3250I {  delivery order.  Sets  MONTHS to 0 and Maint_Factor to the    }
```

```
3251I {  emerg_maint_rate input by the user.  Uses WRITE_A_LINE to     }
3252I {  actually write to disk.                                       }
3253I {*****************************************************************}
3254I
3255I Begin  { FDC Emergency Maint }
3256I    Maint_Months := 0;
3257I    Maint_Factor := Emerg_Maint_Rate;
3258I    Extended_Price := 0;
3259I    WRITE_A_LINE;
3260I End;   { Procedure PRINT_MAINT }
3261I
3262I
3263I Begin  { Procedure CONFIGURE_MAINTENANCE }
3264I    I := I + 1;                          { I=168 PM On-Call }
3265I    {  If no items have been selected thus far, do not write maintenance
3266I       line items to delivery order output diskfile.  }
3267I    IF (Totals [0, 1] > 0) OR (Totals [1, 1] > 0) OR (Totals [2, 1] > 0) OR
3268I       (Totals [3, 1] > 0) OR (Totals [4, 1] > 0) OR (Totals [5, 1] > 0) OR
3269I       (Totals [0, 2] > 0) OR (Totals [1, 2] > 0) OR (Totals [2, 2] > 0) OR
3270I       (Totals [3, 2] > 0) OR (Totals [4, 2] > 0) OR (Totals [5, 2] > 0) THEN
3271I        Begin
3272I            Quantity := 1;
3273I            PRINT_MAINT;
3274I            I := I + 1;          { I=169 Skips PM Per-Call Maintenance }
3275I            I := I + 1;          { I=170  On-Call Maint }
3276I            PRINT_MAINT;
3277I        End
3278I    ELSE I := I + 2;
3279I    I := I + 1;                  { I=171 Skips Per-Call Maintenance }
3280I    I := I + 1;                  { I=172  Emergency Per-Call Maintenance }
3281I    Quantity := Per_Call_Months;
3282I    IF Quantity > 0 THEN PRINT_MAINT;
3283I    COMPUTE_SECTION_TOTALS ('Other');
3284I End;   { Procedure CONFIGURE_MAINTENANCE }
3285I
3286I
3287I Begin  { Procedure CONFIGURE_COMPONENTS }
3288I    CONFIGURE_HARDWARE;
3289I    CONFIGURE_SOFTWARE;
3290I    INITIALIZE_LAST_SCREEN_DATA;
3291I    GET_LAST_SCREEN_DATA;
3292I    CONFIGURE_DOCUMENTATION;
3293I    CONFIGURE_TRAINING;
3294I    CONFIGURE_MAINTENANCE;
3295I End;   { Procedure CONFIGURE_COMPONENTS }
3295|                        { Name of work procedures include file }
3296|
3297|
3298| PROCEDURE SUMMARIZE;
3299|
```

```
3300| Const
3301|    LF     : Char = #10;    { Decimal Value for an ASCII line feed  }
3302|    CR     : Char = #13;    { Decimal Value for an ASCII carriage return }
3303|    Ctrl_Z : Char = ^Z;     { Value of ASCII "Control-Z" end-of-file marker }
3304|
3305| Var
3306|    System_Downtime : Real;
3307|
3308|
3309| Begin  { Procedure SUMMARIZE }
3310|    System_Downtime := (((Subtotals [0, 1] + Subtotals [0, 3] + Subtotals [1, 1]
3311|                       + Subtotals [1, 3] + Costtable[1].purchprice)/48)
3312|                       + System_Downtime_Component) * 0.0125;
3313|    WRITELN (Diskfile);
3314|    WRITELN (Diskfile);
3315|    WRITELN (Diskfile, '"NOTES:"');
3316|    WRITELN (Diskfile);
3317|    WRITELN (Diskfile, '"', 'MAINTENANCE OPTION = ', SiteInfo.maint_options, '"');
3318|    WRITELN (Diskfile);
3319|    WRITELN (Diskfile,'"', 'MAINTENANCE REPAIR AND RESPONSE = ',
3320|                       SiteInfo.maint_response, '"');
3321|    WRITELN (Diskfile);
3322|    WRITELN (Diskfile,
3323|    '"MAINTENANCE REQUIRED FROM END OF NINETY (90) DAY WARRANTY PERIOD."');
3324|    WRITELN (Diskfile);
3325|    WRITELN (Diskfile,
3326|    '"CARD READER AND CARD READER PUNCH CAPABILITIES TEST REQUIREMENTS ARE WAIVED."');
3327|    WRITELN (Diskfile);
3328|    WRITELN (Diskfile, '"SYSTEM DOWNTIME CREDIT FACTOR PER HOUR EQUALS: $"',
3329|                       '"W"', '" "', '" "', System_Downtime);
3330|    WRITELN (Diskfile);
3331|    (*************************************************)
3332|    (*   Terminate the .PRN file with a <CR>, <LF> and    *)
3333|    (*   a <Ctrl Z> End Of File Character.                *)
3334|    (*************************************************)
3335|    WRITELN (Diskfile, CR, LF, Ctrl_Z);
3336|    CLOSE (Diskfile);
3337|    CLOSE (Screenfile);
3338|    TextColor (12);
3339|    ClrScr;
3340|    GOTOXY (4, 9);
3341|    WRITELN ('Thank you for using the SPLICE configurer.':58);
3342|    WRITELN;
3343|    WRITELN;
3344|    TextColor (15);
3345|    WRITELN ('Your output file is called ':48, PRN_File_Name,'.');
3346|    WRITELN;
3347|    WRITELN;
3348|    TextColor (11);
3349|    WRITELN ('The output file is ready for import into LOTUS 1-2-3':65);
```

```
3350|    TextColor (15);
3351| End;   { Procedure SUMMARIZE }
3352|
3353|
3354| Begin                                  {  Main Program  }
3355|    INITIALIZE;
3356|    CONFIGURE_COMPONENTS;
3357|    SUMMARIZE;
3358| End.
```

Page 1 CONFMOD.PRG Program Listing

```
1  * PROCEDURE CONFMOD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER THE OPPORTUNITY TO MODIFY OR REVIEW
9  *                   ALL DATA IN THE SITE CONFIGURATION DATABASE.
10 *
11 * INPUT FILES     : NONE
12 *
13 * OUTPUT FILE     : NONE
14 *
15 * MODULES CALLED : CONFUPD.PRG. CONFPREV.PRG
16 *
17 * CALLED BY       : MAINMENU.PRG
18 *
19 * LOCAL VARIABLES: SELEKT
20 *
21 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
22 *
23 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE
24 * SELECTION.
25 *
26 STORE "1" TO SELEKT
27 DO WHILE SELEKT < "3"
28    SET COLOR TO W/B, W/B
29    CLEAR
30    ?? FLASH + "W.CONFMOD/"
31    SET CONSOLE OFF
32    WAIT TO SELEKT
33    SET CONSOLE ON
34 *
35 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
36 *
37    DO  CASE
38 *
39 *       CALL THE SITE CONFIGURATION UPDATE PROGRAM.
40        CASE SELEKT = "1"
41            DO CONFUPD
42 *
43 *       CALL THE SITE CONDIGURATION REVIEW PROGRAM.
44        CASE SELEKT = "2"
45            DO CONFREV
46 *
47 *       RETURN TO THE MAIN MENU PROGRAM.
48        CASE SELEKT = "3"
49 *
50    ENDCASE
```

```
51| *
52| ENDDO WHILE SELEKT < "3"
53| *
54| *  RETURN TO THE CALLING PROGRAM
55| *
56| RETURN
57| ************************************************************************
```

Page 1 CONFREV.PRG Program Listing

```
1  * PROCEDURE CONFREV.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO REVIEW ANY DATA ELEMENT IN
9  *                   THE SITE NAME DATABASE.
10 *
11 * INPUT FILES     : CONFIG.DBF INDICES: CONFIG.NDX
12 *
13 * OUTPUT FILES    : NONE
14 *
15 * CALLED BY       : CONFMOD.PRG
16 *
17 * MODULES CALLED : DELAY.PRG
18 *
19 * GLOBAL VARIABLE: HISITE, LOSITE
20 *
21 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, ERROR, FIRST_REC, LAST_REC,
22 *                  MADD1, MADD2, MCITY, MCO, MESSAGE, MNAME, MNAMEFL,
23 *                  MOPT, MRESP, MSITE, MSTATE, MTYPE, MZIP
24 *
25 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
26 *
27 * CASE SELECTION = 2     REVIEW EXISTING RECORDS
28 *
29 * USE THE SITE NAME (CONFIG) DATABASE USING THE SITE NUMBER INDEX.
30 *
31 SET ESCAPE OFF
32 SET TALK OFF
33 USE CONFIG
34 GO TOP
35 SET COLOR TO W+/B,W+/B,B
36 CLEAR
37 IF EOF() = .T. THEN
38    SET COLOR TO W+/R, W+/R
39    @ 13,24 SAY " The SITE NAME Database is EMPTY! "
40    DO DELAY
41    RETURN
42 ENDIF
43 ?? FLASH + "S.SITENAME.SCR/"
44 @ 24,0 SAY SPACE (80)
45 SET COLOR TO R+/ ,R+/
46 @ 3,23 SAY ' SITE ADDRESS DATA REVIEW FORMAT '
47 STORE 'Enter 00 to start at TOF, 99 to start at EOF, or a site ' +;
48       'number between ' + LOSITE + ' and ' + HISITE + ' ' TO MESSAGE
49 SET COLOR TO  /W,  /W
50 @ 24,0 SAY MESSAGE
```

```
DO WHILE .T.
   SET COLOR TO  /BR, /BR
   STORE '00' TO MSITE
   @ 7,25 GET MSITE PICT '99'
   READ
   IF .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE + ' and ' +;
             HISITE + ', Zero (00) or 99  ' TO ERROR
       @ 24,13 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY MESSAGE
       LOOP
   ELSE
       IF (MSITE = '00' .OR. MSITE = '99') THEN
           USE CONFIG
           IF MSITE = '00' THEN
               GO BOTTOM
               STORE RECNO() TO LAST_REC
               GO TOP
               STORE RECNO() TO FIRST_REC
           ELSE
               GO TOP
               STORE RECNO() TO FIRST_REC
               GO BOTTOM
               STORE RECNO() TO LAST_REC
           ENDIF MSITE = '00'
           EXIT
       ELSE
           USE CONFIG INDEX CONFIG.NDX
           GO TOP
           STORE RECNO() TO FIRST_REC
           GO BOTTOM
           STORE RECNO() TO LAST_REC
           FIND &MSITE
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
               STORE " No records exist for site number " + MSITE +;
                       ", try again " TO ERROR
               @ 24,16 SAY ERROR
               SET COLOR TO W+/R, W+/R
               DO DELAY
               SET COLOR TO  /W,   /W
               @ 24,0 SAY MESSAGE
               LOOP
           ELSE
```

```
101                 EXIT
102             ENDIF EOF() = .T.
103         ENDIF (MSITE = '00' .OR. MSITE = '99')
104     ENDIF
105 ENDDO WHILE .T.
106 *
107 SET COLOR TO W/B, W/B
108 @ 24,0 SAY SPACE(80)
109 *
110 DO WHILE .T.
111     SET COLOR TO R+/B, R+/B
112     @ 5,47  SAY RECNO() PICT "999"
113     SET COLOR TO  /BR, /BR
114     @ 7,25  SAY SITENO PICT "99"
115     @ 8,25  SAY SITENAME PICT "!!!
```

```
151             SKIP
152         ENDIF
153     ENDIF
154 *
155 *   SKIP TO THE PREVIOUS RECORD TO BE REVIEWED
156 *
157     IF CHOICE = "P" THEN
158         IF RECNO() = FIRST_REC THEN
159             GO BOTTOM
160         ELSE
161             SKIP -1
162         ENDIF
163     ENDIF
164 *
165 *   USER HAS DECIDED TO EXIT THE REVIEW
166 *
167     IF CHOICE  = "X"
168         EXIT
169     ENDIF
170 *
171 ENDDO WHILE .T.
172 *
173 * RETURN TO CALLING PROGRAM.
174 *
175 RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, ERROR, FIRST_REC, LAST_REC
176 CLOSE DATABASES
177 RETURN
178 ************************************************************
```

Page 1 CONFUPD.PRG Program Listing

```
1  * PROCEDURE CONFUPD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO MODIFY ANY DATA ELEMENT IN
9  *                   THE SITE NAME DATABASE.
10 *
11 * INPUT FILES     : CONFIG.DBF INDICES: CONFIG.NDX
12 *
13 * OUTPUT FILES    : CONFIG.DBF, INDICES: CONFIG.NDX
14 *
15 * MODULES CALLED : DELAY.PRG
16 *
17 * CALLED BY       : CONFMOD.PRG
18 *
19 * GLOBAL VARIABLE: HISITE, LOSITE
20 *
21 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, ERROR, FIRST_REC, LAST_REC,
22 *                  MADD1, MADD2, MCITY, MCO, MESSAGE, MNAME, MNAMEFL,
23 *                  MOPT, MRESP, MSITE, MSTATE, MTYPE, MZIP, SAVEIT
24 *
25 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
26 *
27 * BEGIN
28 * CASE SELECTION = 1     UPDATE EXISTING RECORDS
29 *
30 * USE THE SITE NAME (CONFIG.DBF) DATABASE USING THE SITE NUMBER INDEX.
31 *
32 SET ESCAPE OFF
33 SET SCOREBOARD OFF
34 SET TALK OFF
35 USE CONFIG
36 GO TOP
37 SET COLOR TO W+/B, W+/B, B
38 CLEAR
39 IF EOF() = .T. THEN
40    SET COLOR TO W+/R, W+/R
41    @ 13,24 SAY " The SITE NAME Database is EMPTY! "
42    DO DELAY
43    RETURN
44 ENDIF
45 ?? FLASH + "S.SITENAME.SCR/"
46 @ 24,0 SAY SPACE(80)
47 SET COLOR TO R+/ ,R+/
48 @ 3,23 SAY ' SITE ADDRESS DATA UPDATE FORMAT '
49 STORE 'Enter 00 to start at TOF, 99 to start at EOF, or a site ' +;
50       'number between ' + LOSITE + ' and ' + HISITE + ' ' TO MESSAGE
```

```
SET COLOR TO  /W,  /W
@ 24,0 SAY MESSAGE
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE '00' TO MSITE
   @ 7,25 GET MSITE PICT '99'
   READ
   IF .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE + ' and ' +;
             HISITE + ', Zero (00) or 99  ' TO ERROR
       @ 24,13 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY MESSAGE
       LOOP
   ELSE
       IF (MSITE = '00' .OR. MSITE = '99') THEN
           USE CONFIG
           IF MSITE = '00' THEN
               GO BOTTOM
               STORE RECNO() TO LAST_REC
               GO TOP
               STORE RECNO() TO FIRST_REC
           ELSE
               GO TOP
               STORE RECNO() TO FIRST_REC
               GO BOTTOM
               STORE RECNO() TO LAST_REC
           ENDIF MSITE = '00'
           EXIT
       ELSE
           USE CONFIG INDEX CONFIG.NDX
           GO TOP
           STORE RECNO() TO FIRST_REC
           GO BOTTOM
           STORE RECNO() TO LAST_REC
           FIND &MSITE
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
               STORE " No records exist for site number " + MSITE +;
                       ", try again " TO ERROR
               @ 24,16 SAY ERROR
               SET COLOR TO W+/R, W+/R
               DO DELAY
               SET COLOR TO  /W,   /W
               @ 24,0 SAY MESSAGE
```

```
101                 LOOP
102             ELSE
103                 EXIT
104             ENDIF EOF() = .T.
105         ENDIF (MSITE = '00' .OR. MSITE = '99')
106     ENDIF
107 ENDDO WHILE .T.
108 *
109 SET COLOR TO W/B, W/B
110 @ 24,0 SAY SPACE(80)
111 *
112 STORE SPACE(16) + 'Press "Page Down" key to terminate record update' +;
113       SPACE(16) TO MESSAGE
114 STORE 1 TO INTRO
115 DO WHILE .T.
116     SET COLOR TO  /W, /W
117     @ 24,0 SAY MESSAGE
118 *
119 *   INFORM THE USER OF HOW TO TERMINATE THE UPDATE OF A RECORD
120 *
121     IF INTRO = 1 THEN
122         STORE 0 TO INTRO
123         ?? FLASH + "W.CONFUPD/"
124         SET CONSOLE OFF
125         WAIT TO ANS
126         SET CONSOLE ON
127     ENDIF
128 *
129 *   STORING THE OLD RECORD TO A WORK RECORD AREA.  THE M PREFIX
130 *   INDICATES MEMORY VARIABLES DISTINGUISHING THEM FROM THEIR
131 *   CORRESPONDING DATABASE FIELDS.
132 *
133     STORE SITENO      TO MSITE
134     STORE SITENAME    TO MNAME
135     STORE SITECO      TO MCO
136     STORE SITENAMEFL TO MNAMEFL
137     STORE SITEADD1    TO MADD1
138     STORE SITEADD2    TO MADD2
139     STORE SITECITY    TO MCITY
140     STORE SITESTATE   TO MSTATE
141     STORE SITEZIP     TO MZIP
142     STORE SITETYPE    TO MTYPE
143     STORE MAINTOPT    TO MOPT
144     STORE MAINTRESP   TO MRESP
145 *
146     SET COLOR TO R+/B, R+/B
147     @ 5,47  SAY RECNO() PICT "999"
148     SET COLOR TO  /BR, /BR
149 *
150     @ 7,25  SAY MSITE PICT "99"
```

```
151     @ 8,25  GET MNAME PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
152     @ 9,25  GET MCO PICT "!!!!!!!!!!!!!!!!!!!!!"
153     @ 10,25 GET MNAMEFL PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
154     @ 11,25 GET MADD1 PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
155     @ 12,25 GET MADD2 PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
156     @ 13,25 GET MCITY PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
157     @ 14,25 GET MSTATE PICT "!!"
158     @ 15,25 GET MZIP PICT "9999999999"
159     @ 16,25 SAY MTYPE PICT "!!!!"
160     @ 17,35 GET MOPT PICT "!!!!"
161     @ 18,35 GET MRESP PICT "!"
162     READ
163   *
164   *  CHECK TO SEE IF ANY RECORD WAS CHANGED
165   *
166     SET COLOR TO W/B, W/B
167     @ 24,0 SAY SPACE(80)
168     STORE 1 TO SAVEIT
169     IF (SITENO = MSITE)
170       IF (SITENAME = MNAME)
171         IF (SITECO = MCO)
172           IF (SITENAMEFL = MNAMEFL)
173             IF (SITEADD1 = MADD1)
174               IF (SITEADD2 = MADD2)
175                 IF (SITECITY = MCITY)
176                   IF (SITESTATE = MSTATE)
177                     IF (SITEZIP = MZIP)
178                       IF (SITETYPE = MTYPE)
179                         IF (MAINTOPT = MOPT)
180                           IF (MAINTRESP = MRESP)
181                               STORE 0 TO SAVEIT
182                           ENDIF
183                         ENDIF
184                       ENDIF
185                     ENDIF
186                   ENDIF
187                 ENDIF
188               ENDIF
189             ENDIF
190           ENDIF
191         ENDIF
192       ENDIF
193     ENDIF
194   *
195   *  ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES, ONLY IF ANY
196   *  CHANGES WERE MADE
197   *
198     IF SAVEIT = 1 THEN
199         SET COLOR TO W+/B, W+/B
200         @ 20,12 SAY "Do you want to accept the changes?  (Yes or No):"
```

```
201         SET COLOR TO R+/B, R+/B
202         @ 20,49 SAY "Y"
203         @ 20,56 SAY "N"
204         STORE "N" TO ACCEPT
205         @ 20,62 GET ACCEPT PICT "!"
206         READ
207 *
208 *       ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
209 *
210         DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
211             IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
212                 SET COLOR TO W/B, W/B
213                 @ 24,0 SAY SPACE(80)
214                 SET COLOR TO W+/R,W+/R
215                 @ 24,24 SAY " Response must be either N or Y "
216                 DO DELAY
217                 STORE "N" TO ACCEPT
218             ENDIF
219             SET COLOR TO R+/B,R+/B
220             @ 20,62 GET ACCEPT PICT "!"
221             READ
222         ENDDO
223         @ 20,10 SAY SPACE (60)
224 *
225 *       STORING THE CORRECTED EDIT FIELDS FROM THE WORK AREA.
226 *
227         IF ACCEPT = "Y" THEN
228             REPLACE SITENO     WITH MSITE
229             REPLACE SITENAME   WITH MNAME
230             REPLACE SITECO     WITH MCO
231             REPLACE SITENAMEFL WITH MNAMEFL
232             REPLACE SITEADD1   WITH MADD1
233             REPLACE SITEADD2   WITH MADD2
234             REPLACE SITECITY   WITH MCITY
235             REPLACE SITESTATE  WITH MSTATE
236             REPLACE SITEZIP    WITH MZIP
237             REPLACE SITETYPE   WITH MTYPE
238             REPLACE MAINTOPT   WITH MOPT
239             REPLACE MAINTRESP  WITH MRESP
240         ENDIF
241     ENDIF
242 *
243     SET COLOR TO R+/B,R+/B
244     STORE "N" TO CHOICE
245     @ 22,68 GET CHOICE PICT "!"
246     READ
247 *
248 *   ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
249 *
250     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
```

```
251         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
252             SET COLOR TO W/B, W/B
253             @ 24,0 SAY SPACE(80)
254             SET COLOR TO W+/R, W+/R
255             @ 24,23 SAY " Response must be either N, P or X "
256             DO DELAY
257             STORE "N" TO CHOICE
258         ENDIF
259         SET COLOR TO R+/B, R+/B
260         @ 22,68 GET CHOICE PICT "!"
261         READ
262     ENDDO
263 *
264 *   SKIP TO THE NEXT RECORD TO BE REVIEWED
265 *
266     IF CHOICE = "N" THEN
267         IF RECNO () = LAST_REC THEN
268             GO TOP
269         ELSE
270             SKIP
271         ENDIF
272     ENDIF
273 *
274 *   SKIP TO THE PREVIOUS RECORD TO BE REVIEWED
275 *
276     IF CHOICE = "P" THEN
277         IF RECNO() = FIRST_REC THEN
278             GO BOTTOM
279         ELSE
280             SKIP -1
281         ENDIF
282     ENDIF
283 *
284 *   USER HAS DECIDED TO EXIT THE REVIEW
285 *
286     IF CHOICE  = "X"
287         EXIT
288     ENDIF
289 *
290 ENDDO WHILE .T.
291 *
292 *   RETURN TO CALLING PROGRAM.
293 *
294 RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, ERROR, FIRST_REC, LAST_REC, SAVEIT
295 CLOSE DATABASES
296 RETURN
297 ************************************************************
```

Page 1 DATERPTS.PRG Program Listing

```
1  * PROCEDURE DATERPTS.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SELECTION OF EFFECTIVE DELIVERY
9  *                   ORDER DATE LEVEL REPORTS.
10 *
11 * INPUT FILES     : NONE
12 *
13 * OUTPUT FILES    : NONE
14 *
15 * CALLED BY       : REPORCMD.PRG
16 *
17 * MODULES CALLED : EQPDTPRC.PRG, EQPDINPC.PRG, SNODTRPT.PRG
18 *
19 * LOCAL VARIABLES: DATERPTS
20 *
21 * DATE LAST TIME MODIFIED ==========> 18 DECEMBER 1985 <==========
22 *
23 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE SELECTION.
24 *
25 STORE "1" TO DATERPTS
26 DO WHILE DATERPTS < "4"
27    SET COLOR TO W/B, W/B, B
28    CLEAR
29    ?? FLASH + "W.DATERPTS/"
30    SET CONSOLE OFF
31    WAIT TO DATERPTS
32    SET CONSOLE ON
33 *
34 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
35 *
36    DO CASE
37 *
38 *       CALL THE EQUIPMENT EFFECTIVE DELIVERY ORDER DATE LEVEL REPORT
39 *       WITH UNIT COST PROGRAM.
40          CASE DATERPTS = "1"
41              DO EQPDTPRC
42 *
43 *       CALL THE EQUIPMENT EFFECTIVE DELIVERY ORDER DATE LEVEL REPORT
44 *       WITHOUT UNIT COST PROGRAM.
45          CASE DATERPTS = "2"
46              DO EQPDINPC
47 *
48 *       CALL THE SERIAL NUMBER EFFECTIVE DELIVERY ORDER DATE LEVEL REPORT.
49          CASE DATERPTS = "3"
50              DO SNODTRPT
```

```
51 | *
52 | *       RETURN TO THE SPLICE REPORTING LEVEL MENU.
53 |         CASE DATERPTS = "4"
54 | *
55 |    ENDCASE
56 | *
57 | ENDDO  (WHILE DATERPTS = "4")
58 | *
59 | *  RETURN TO THE CALLING PROGRAM
60 | *
61 | RETURN
62 | ************************************************************************
```

```
1  * PROCEDURE DELAY.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT J. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO PROVIDE A SHORT DELAY AFTER THE DISPLAY OF AN
9  *                   ERROR MESSAGE TO THE USER SUFFICIENT TIME TO READ
10 *                   THE MESSAGE.
11 *
12 * INPUT FILES     : NONE
13 *
14 * OUTPUT FILES    : NONE
15 *
16 * CALLED BY       : SELECTOR.PRG, MAINMENU.PRG, CONFREV.PRG, CONFUPD.PRG
17 *
18 * LOCAL VARIABLES: DELAY
19 *
20 * DATE LAST TIME MODIFIED ==========> 18 DECEMBER 1985 <==========
21 *
22 STORE 1 TO DELAY
23 DO WHILE DELAY < 60
24     STORE DELAY + 1 TO DELAY
25 ENDDO DELAY < 60
26 *
27 *  CLEAR OUT THE ERROR MESSAGE
28 *
29 SET COLOR TO W+/B, W+/B
30 @ 24,0 SAY SPACE (80)
31 *
32 *  RETURN TO THE CALLING PROGRAM
33 *
34 RETURN
35 ************************************************************************
```

Page 1 DESPMOD.PRG Program Listing

```
1  * PROCEDURE DESPMOD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER THE OPPORTUNITY TO MODIFY OR REVIEW
9  *                   ALL DATA IN THE DESCRIPTION DATABASE.
10 *
11 * INPUT FILES     : NONE
12 *
13 * OUTPUT FILE     : NONE
14 *
15 * CALLED BY       : MAINMENU.PRG
16 *
17 * MODULES CALLED : DESPPUPD.PRG, DESPPREV.PRG, DELAY.PRG
18 *
19 * LOCAL VARIABLES: SELEKT
20 *
21 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
22 *
23 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE
24 * SELECTION.
25 *
26 STORE "1" TO SELEKT
27 DO WHILE SELEKT < "3"
28    SET COLOR TO W/B, W/B
29    CLEAR
30    ?? FLASH + "W.DESPMOD/"
31    SET CONSOLE OFF
32    WAIT TO SELEKT
33    SET CONSOLE ON
34 *
35 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
36 *
37    DO CASE
38 *
39 *       CALL THE DESCRIPTION UPDATE PROGRAM.
40        CASE SELEKT = "1"
41            DO DESPPUPD
42 *
43 *       CALL THE DESCRIPTION REVIEW PROGRAM.
44        CASE SELEKT = "2"
45            DO DESPPREV
46 *
47 *       RETURN TO THE MAIN MENU PROGRAM.
48        CASE SELEKT = "3"
49 *
50        ENDCASE
```

```
51| *
52| ENDDO  (WHILE SELEKT = "3")
53| *
54| *  RETURN TO THE CALLING PROGRAM
55| *
56| RETURN
57| ************************************************************************
```

Page 1 DESPPREV.PRG Program Listing

```
1  * PROCEDURE DESPPREV.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO REVIEW ANY DATA ELEMENT IN
9  *                   THE DESCRIPTION DATABASE.
10 *
11 * INPUT FILES     : DESCRIP.DBF INDICES: DESCRIP.NDX
12 *
13 * OUTPUT FILES    : DESCRIP.DBF, INDICES: DESCRIP.NDX
14 *
15 * MODULES CALLED : DELAY.PRG
16 *
17 * CALLED BY       : DESPMOD.PRG
18 *
19 * GLOBAL VARIABLE: LOFNUM, HIFNUM
20 *
21 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, ERROR, FIRST_REC, LAST_REC,
22 *                  MBMAINT, MCLIN, MDESCRIP, MESSAGE, MFDCMODL,
23 *                  MFEAT, MMODELNO, MTCOMP
24 *
25 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
26 *
27 * BEGIN
28 * CASE SELECTION = 2     REVIEW EXISTING RECORDS
29 *
30 * USE DESCRIPTION DATABASE USING THE FEATURE NUMBER INDEX.
31 *
32 SET ESCAPE OFF
33 SET TALK OFF
34 USE DESCRIP
35 GO TOP
36 SET COLOR TO W+/B, W+/B, B
37 CLEAR
38 IF EOF() = .T. THEN
39    SET COLOR TO W+/R, W+/R
40    @ 13,17 SAY " The EQUIPMENT DESCRIPTION Database is EMPTY! "
41    DO DELAY
42    RETURN
43 ENDIF
44 ?? FLASH + "S.DESCRIPT.SCR/"
45 @ 24,0  SAY SPACE(80)
46 @ 2,39  SAY "REVIEW"
47 STORE '  Enter 00 to start at TOF, 99 to start at EOF, or a six digit ' +;
48       'feature number    ' TO MESSAGE
49 SET COLOR TO  /W,  /W
50 @ 24,0 SAY MESSAGE
```

```
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE '00    ' TO MFEAT
   @ 6,45 GET MFEAT PICT '999999'
   READ
   IF .NOT. ((MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
             MFEAT = '00    ' .OR. MFEAT = '99    ')
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOFNUM + ' and ' +;
             HIFNUM + ', Zero (00) or 99  ' TO ERROR
       @ 24,8 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY MESSAGE
       LOOP
   ELSE
       IF (MFEAT = '00    ' .OR. MFEAT = '99    ') THEN
           USE DESCRIP
           IF MFEAT = '00    ' THEN
               GO BOTTOM
               STORE RECNO() TO LAST_REC
               GO TOP
               STORE RECNO() TO FIRST_REC
           ELSE
               IF MFEAT = '99    ' THEN
                   GO TOP
                   STORE RECNO() TO FIRST_REC
                   GO BOTTOM
                   STORE RECNO() TO LAST_REC
               ENDIF MFEAT = '99    '
           ENDIF MFEAT = '00    '
           STORE FEATURENO TO MFEAT
           EXIT
       ELSE
           USE DESCRIP INDEX DESCRIP.NDX
           GO TOP
           STORE RECNO() TO FIRST_REC
           GO BOTTOM
           STORE RECNO() TO LAST_REC
           FIND &MFEAT
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
               SET COLOR TO W+/R, W+/R
               STORE ' No record exists for feature number ' +;
                     MFEAT + ', try again ' TO ERROR
               @ 24,12 SAY ERROR
               DO DELAY
```

```
101                 SET COLOR TO  /W,  /W
102                 @ 24,0 SAY MESSAGE
103                 LOOP
104             ELSE
105                 EXIT
106             ENDIF EOF() = .T.
107         ENDIF (MFEAT = '00    ' .OR. MFEAT = '99    ')
108     ENDIF
109 ENDDO WHILE .T.
110 *
111 SET COLOR TO W/B, W/B
112 @ 24,0 SAY SPACE (80)
113 @ 20,20 SAY "To view this field, enter the update mode."
114 DO WHILE .T.
115     SET COLOR TO R+/B, R+/B
116     @ 4,46  SAY RECNO() PICT "99999"
117     SET COLOR TO  /BR,  /BR
118     @ 6,45  SAY FEATURENO PICT "999999"
119     @ 8,45  SAY CLIN PICT "9999"
120     @ 10,45 SAY DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
121     @ 12,45 SAY MODELNO PICT "!!!!!!!!!!"
122     @ 14,45 SAY FDCMODEL PICT "!!!!!!!!!!!!!!!"
123     @ 16,45 SAY TYPECOMPON PICT "!"
124     @ 18,45 SAY BASEMAINT PICT "9999.99"
125     SET COLOR TO R+/B, R+/B
126     STORE "N" TO CHOICE
127     @ 22,67 GET CHOICE PICT "!"
128     READ
129 *
130 *   ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
131 *
132     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
133         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
134             SET COLOR TO W+/R, W+/R
135             @ 24,23 SAY " Response must be either N, P or X "
136             DO DELAY
137             STORE "N" TO CHOICE
138         ENDIF
139         SET COLOR TO R+/B, R+/B
140         @ 22,67 GET CHOICE PICT "!"
141         READ
142     ENDDO
143 *
144 *   SKIP TO THE NEXT RECORD TO BE REVIEWED
145 *
146     IF CHOICE = "N" THEN
147         IF RECNO () = LAST_REC THEN
148             GO TOP
149         ELSE
150             SKIP
```

```
151         ENDIF
152      ENDIF
153   *
154   *  TO THE PREVIOUS RECORD TO BE REVIEWED
155   *
156      IF CHOICE = "P" THEN
157         IF RECNO() = FIRST_REC THEN
158            GO BOTTOM
159         ELSE
160            SKIP -1
161         ENDIF
162      ENDIF
163   *
164   *  USER HAS DECIDED TO EXIT THE REVIEW
165   *
166      IF CHOICE  = "X"
167         EXIT
168      ENDIF
169   ENDDO WHILE .T.
170   *
171   *  RETURN TO CALLING PROGRAM.
172   *
173   RELEASE ALL LIKE M*, CHOICE, ERROR, FIRST_REC, LAST_REC
174   CLOSE DATABASES
175   RETURN
176   ************************************************************************
```

Page 1 DESPPUPD.PRG Program Listing

```
1  * PROCEDURE DESPPUPD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO MODIFY ANY DATA ELEMENT IN
9  *                   THE DESCRICPTION DATABASE.
10 *
11 * INPUT FILES     : DESCRIP.DBF INDICES: DESCRIP.NDX
12 *
13 * OUTPUT FILES    : DESCRIP.DBF, INDICES: DESCRIP.NDX
14 *
15 * MODULES CALLED : DELAY.PRG
16 *
17 * CALLED BY       : DESPMOD.PRG
18 *
19 * GLOBAL VARIABLE: LOFNUM, HIFNUM
20 *
21 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, ERROR, INTRO, MBMAINT, MCLIN,
22 *                  MDESCRIP, MESSAGE, MFDCMODL, MFEAT, MMODELNO, MTCOMP
23 *
24 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
25 *
26 * BEGIN
27 * CASE SELECTION = 1     UPDATE EXISTING RECORDS
28 *
29 * USE DESCRIPTION DATABASE USING THE FEATURE NUMBER INDEX.
30 *
31 SET ESCAPE OFF
32 SET TALK OFF
33 USE DESCRIP
34 GO TOP
35 SET COLOR TO W+/B, W+/B, B
36 CLEAR
37 IF EOF() = .T. THEN
38    SET COLOR TO W+/R, W+/R
39    @ 13,17 SAY " The EQUIPMENT DESCRIPTION Database is EMPTY! "
40    DO DELAY
41    RETURN
42 ENDIF
43 ?? FLASH + "S.DESCRIPT.SCR/"
44 @ 24,0  SAY SPACE(80)
45 @ 2,39  SAY "UPDATE"
46 STORE '  Enter 00 to start at TOF, 99 to start at EOF, or a six digit ' +;
47       'feature number    ' TO MESSAGE
48 SET COLOR TO  /W,  /W
49 @ 24,0 SAY MESSAGE
50 DO WHILE .T.
```

```
51      SET COLOR TO  /BR,  /BR
52      STORE '00     ' TO MFEAT
53      @ 6,45 GET MFEAT PICT '999999'
54      READ
55      IF .NOT. ((MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
56                MFEAT = '00     ' .OR. MFEAT = '99     ')
57          SET COLOR TO W/B, W/B
58          @ 24,0 SAY SPACE(80)
59          SET COLOR TO W+/R, W+/R
60          STORE ' Response must be between ' + LOFNUM + ' and ' +;
61                HIFNUM + ', Zero (00) or 99  ' TO ERROR
62          @ 24,8 SAY ERROR
63          DO DELAY
64          SET COLOR TO  /W,  /W
65          @ 24,0 SAY MESSAGE
66          LOOP
67      ELSE
68          IF (MFEAT = '00     ' .OR. MFEAT = '99     ') THEN
69              USE DESCRIP
70              IF MFEAT = '00     ' THEN
71                  GO BOTTOM
72                  STORE RECNO() TO LAST_REC
73                  GO TOP
74                  STORE RECNO() TO FIRST_REC
75              ELSE
76                  IF MFEAT = '99     ' THEN
77                      GO TOP
78                      STORE RECNO() TO FIRST_REC
79                      GO BOTTOM
80                      STORE RECNO() TO LAST_REC
81                  ENDIF MFEAT = '99     '
82              ENDIF MFEAT = '00     '
83              STORE FEATURENO TO MFEAT
84              EXIT
85          ELSE
86              USE DESCRIP INDEX DESCRIP.NDX
87              GO TOP
88              STORE RECNO() TO FIRST_REC
89              GO BOTTOM
90              STORE RECNO() TO LAST_REC
91              FIND &MFEAT
92              IF EOF() = .T. THEN
93                  SET COLOR TO W/B, W/B
94                  @ 24,0 SAY SPACE(80)
95                  SET COLOR TO W+/R, W+/R
96                  STORE ' No record exists for feature number ' +;
97                        MFEAT + ', try again ' TO ERROR
98                  @ 24,12 SAY ERROR
99                  DO DELAY
100                 SET COLOR TO  /W,  /W
```

```
101                 @ 24,0 SAY MESSAGE
102                 LOOP
103             ELSE
104                 EXIT
105             ENDIF EOF() = .T.
106         ENDIF (MFEAT = '00    ' .OR. MFEAT = '99    ')
107     ENDIF
108 ENDDO WHILE .T.
109 *
110 STORE SPACE(16) + 'Press "Page Down" key to terminate record update' +;
111       SPACE(16) TO MESSAGE
112 STORE 1 TO INTRO
113 DO WHILE .T.
114 *
115 *   INFORM THE USER OF HOW TO TERMINATE THE UPDATE OF A RECORD
116 *
117     IF INTRO = 1 THEN
118         STORE 0 TO INTRO
119         ?? FLASH + "W.DESPPUPD/"
120         SET CONSOLE OFF
121         WAIT TO ANS
122         SET CONSOLE ON
123     ENDIF
124 *
125 *   STORING THE OLD RECORD TO A WORK RECORD AREA.  THE M PREFIX
126 *   INDICATES MEMORY VARIABLES DISTINGUISHING THEM FROM THEIR
127 *   CORRESPONDING DATABASE FIELDS.
128 *
129     STORE FEATURENO   TO MFEAT
130     STORE CLIN        TO MCLIN
131     STORE DESCIPT     TO MDESCRIP
132     STORE MODELNO     TO MMODELNO
133     STORE FDCMODEL    TO MFDCMODL
134     STORE TYPECOMPON  TO MTCOMP
135     STORE BASEMAINT   TO MBMAINT
136     SET COLOR TO R+/B, R+/B
137     @ 4,46  SAY RECNO() PICT "99999"
138     SET COLOR TO  /W, /W
139     @ 24,0 SAY MESSAGE
140 *
141     SET COLOR TO  /BR,  /BR
142     @ 6,45  SAY MFEAT PICT "999999"
143     @ 8,45  GET MCLIN PICT "9999"
144     @ 10,45 GET MDESCRIP PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
145     @ 12,45 GET MMODELNO PICT "!!!!!!!!!!"
146     @ 14,45 GET MFDCMODL PICT "!!!!!!!!!!!!!!!"
147     @ 16,45 GET MTCOMP PICT "!"
148     @ 18,45 GET MBMAINT PICT "9999.99"
149     READ
150 *
```

```
151     SET COLOR TO W/B, W/B
152     @ 24,0 SAY SPACE(80)
153  *
154  *  ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES, ONLY IF ANY
155  *  CHANGES WERE MADE
156  *
157     IF .NOT. (FEATURENO=MFEAT .AND. CLIN=MCLIN .AND. DESCIPT=MDESCRIP .AND.;
158               MODELNO=MMODELNO .AND. FDCMODEL=MFDCMODL .AND. TYPECOMPON =;
159               MTCOMP .AND. BASEMAINT=MBMAINT) THEN
160         SET COLOR TO W+/ , W+/
161         @ 21,10 SAY SPACE (55)
162         @ 21,12 SAY "Do you want to accept the changes?  (Yes or No):"
163         SET COLOR TO R+/ , R+/
164         @ 21,49 SAY "Y"
165         @ 21,56 SAY "N"
166         STORE "N" TO ACCEPT
167         @ 21,62 GET ACCEPT PICT "!"
168         READ
169  *
170  *       ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
171  *
172         DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
173             IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
174                 SET COLOR TO W/B, W/B
175                 @ 24,0 SAY SPACE(80)
176                 SET COLOR TO W+/R,W+/R
177                 @ 24,24 SAY " Response must be either N or Y "
178                 DO DELAY
179                 STORE "N" TO ACCEPT
180                 SET COLOR TO  /W,  /W
181                 @ 24,0 SAY MESSAGE
182             ENDIF
183             SET COLOR TO R+/ ,R+/
184             @ 21,62 GET ACCEPT PICT "!"
185             READ
186         ENDDO
187         SET COLOR TO W+/B, W+/B
188         @ 21,10 SAY SPACE (60)
189  *
190  *       STORING THE CORRECTED EDIT FIELDS FROM THE WORK AREA.
191  *
192         IF ACCEPT = "Y" THEN
193             REPLACE FEATURENO  WITH MFEAT
194             REPLACE CLIN       WITH MCLIN
195             REPLACE DESCIPT    WITH MDESCRIP
196             REPLACE MODELNO    WITH MMODELNO
197             REPLACE FDCMODEL   WITH MFDCMODL
198             REPLACE TYPECOMPON WITH MTCOMP
199             REPLACE BASEMAINT  WITH MBMAINT
200         ENDIF
```

```
201     ENDIF
202  *
203     SET COLOR TO W/B, W/B
204     @ 21,10 SAY SPACE (55)
205  *
206  *  ASK THE USER IF HE/SHE DESIRES TO CHANGE THE NOTES FIELD
207  *
208     SET COLOR TO W+/B, W+/B
209     @ 20,18 SAY "Edit the NOTES field?  (Yes or No):"
210     SET COLOR TO R+/B, R+/B
211     @ 20,42 SAY "Y"
212     @ 20,49 SAY "N"
213     STORE "N" TO ACCEPT
214     @ 20,54 GET ACCEPT PICT "!"
215     READ
216  *
217  *  ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
218  *
219     DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
220         IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
221             SET COLOR TO W/B, W/B
222             @ 24,0 SAY SPACE(80)
223             SET COLOR TO W+/R, W+/R
224             @ 24,24 SAY " Response must be either N or Y "
225             DO DELAY
226             STORE "N" TO ACCEPT
227             SET COLOR TO  /W,  /W
228             @ 24,0 SAY MESSAGE
229         ENDIF
230         SET COLOR TO R+/B, R+/B
231         @ 20,54 GET ACCEPT PICT "!"
232         READ
233     ENDDO
234  *
235     IF ACCEPT = "Y" THEN
236         ?? FLASH + "W.NOTES/"
237         SET CONSOLE OFF
238         WAIT TO ANS
239         SET CONSOLE ON
240         CHANGE FIELDS NOTES
241         SET COLOR TO W+/B, W+/B, B
242         CLEAR
243         ?? FLASH + "S.DESCRIPT.SCR/"
244         @ 24,0 SAY SPACE(80)
245         SET COLOR TO W+/B, W+/B
246         @ 2,39  SAY "UPDATE"
247         SET COLOR TO R+/B, R+/B
248         @ 4,46  SAY RECNO() PICT "99999"
249         SET COLOR TO  /BR,  /BR
250         @ 6,45  SAY MFEAT PICT "999999"
```

```
251         @ 8,45  SAY MCLIN PICT "9999"
252         @ 10,45 SAY MDESCRIP PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
253         @ 12,45 SAY MMODELNO PICT "!!!!!!!!!!"
254         @ 14,45 SAY MFDCMODL PICT "!!!!!!!!!!!!!!!"
255         @ 16,45 SAY MICOMP PICT "!"
256         @ 18,45 SAY MBMAINT PICT "9999.99"
257     ENDIF
258 *
259     SET COLOR TO W/B, W/B
260     @ 20,18 SAY SPACE (50)
261     SET COLOR TO R+/B, R+/B
262     STORE "N" TO CHOICE
263     @ 22,67 GET CHOICE PICT "!"
264     READ
265 *
266 *   ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
267 *
268     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
269         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
270             SET COLOR TO W/B, W/B
271             @ 24,0 SAY SPACE(80)
272             SET COLOR TO W+/R, W+/R
273             @ 24,23 SAY " Response must be either N, P or X "
274             DO DELAY
275             STORE "N" TO CHOICE
276         ENDIF
277         SET COLOR TO R+/B, R+/B
278         @ 22,67 GET CHOICE PICT "!"
279         READ
280     ENDDO
281 *
282 *   SKIP TO THE NEXT RECORD TO BE REVIEWED
283 *
284     IF CHOICE = "N" THEN
285         IF RECNO () = LAST_REC THEN
286             GO TOP
287         ELSE
288             SKIP
289         ENDIF
290     ENDIF
291 *
292 *   SKIP TO THE PREVIOUS RECORD TO BE REVIEWED
293 *
294     IF CHOICE = "P" THEN
295         IF RECNO() = FIRST_REC THEN
296             GO BOTTOM
297         ELSE
298             SKIP -1
299         ENDIF
300     ENDIF
```

```
301 *
302 *  HAS DECIDED TO EXIT THE REVIEW
303 *
304     IF CHOICE  = "X"
305         EXIT
306     ENDIF
307 ENDDO WHILE .T.
308 *
309 *  RETURN TO CALLING PROGRAM.
310 *
311 RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, ERROR, INTRO
312 CLOSE DATABASES
313 RETURN
314 ************************************************************
```

Page 1 EQPDTNPC.PRG Program Listing

```
1  * PROCEDURE EQPDTNPC.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE EQUIPMENT DELIVERY
9  *                   ORDER DATE LEVEL REPORT WITHOUT UNIT COSTS.
10 *
11 * INPUT FILES     : EQUIP.DBF, EQUIPSD.NDX, DESCRIP.DBF, DESCRIP.NDX,
12 *                   EQUIPSIT.NDX
13 *
14 * OUTPUT FILES    : TEMPONE.DBF, TEMPONE.NDX
15 *
16 * MODULES CALLED : DELAY.PRG
17 *
18 * GLOBAL VARIABLE: HIDATE, HISITE, LODATE, LOSITE
19 *
20 * LOCAL VARIABLES: ACCEPT, CHOICE, COLCNT, ERROR, LINECT, MKEY,
21 *                  MNEWDATE, MOLDATE, MSITE, PAGENO, SYSDATE,
22 *                  TODAY, TODATE
23 *
24 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
25 *
26 * CASE SELECTION = 1    EQUIPMENT EFFECTIVE DELIVERY ORDER REPORT
27 *                       WITHOUT UNIT COST
28 *
29 * CALL EQUIPMENT DATABASE INDEXED ON SITE NUMBER.  DISPLAY ALL
30 * EFFECTIVE DATES OF DELIVERY ORDERS FOR THE USER TO SELECT FROM.
31 * CALL EQUIPMENT DATABASE INDEXED ON EFFECTIVE DELIVERY ORDER DATE
32 * AND SITE NUMBER. COPY APPLICABLE RECORDS TO TEMPONE, INDEXED ON
33 * FEATURE NUMBER.  RELATE TO DESCRIPTION FILE.
34 *
35 SET ESCAPE OFF
36 SET TALK OFF
37 SET COLOR TO W+/B, W+/B, B
38 CLEAR
39 USE EQUIP
40 GO TOP
41 IF EOF() = .T. THEN
42    SET COLOR TO W+/R, W+/R
43    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
44    DO DELAY
45    RETURN
46 ENDIF
47 ?? FLASH + "S.REPORTS.SCR/"
48 @ 24,0 SAY SPACE(80)
49 SET COLOR TO R+/ , R+/
50 @ 2,25 SAY " DELIVERY ORDER LEVEL REPORT "
```

```
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY "Enter site number for which the report is desired:"
*
*  ENSURE THAT TEMPORARY DATABASE AND INDEX DO NOT EXIST, IF SO ERASE THEM
*
SET CONSOLE OFF
ERASE TEMPONE.DBF
ERASE TEMPONE.NDX
SET CONSOLE ON
USE EQUIP INDEX EQUIPSIT
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No equipment exists for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,15 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .T.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
*
SET COLOR TO W+/B, W+/B
@ 05,09 SAY "The following Delivery Order Effective Dates exist for Site"
@ 05,69 SAY MSITE
SET COLOR TO  /BR,  /BR
@ 13,05 SAY SPACE(70)
STORE 1 TO LINECT
STORE 1.00 TO COLCNT
STORE "000000" TO MOLDATE
```

```
101 *
102 DO WHILE SITENO = MSITE
103    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
104        @LINECT+6,57 SAY EFFDATE
105    ELSE
106        IF (COLCNT - (COLCNT * (COLCNT/2)) = 0.00) THEN
107            @LINECT+6,38 SAY EFFDATE
108        ELSE
109            @LINECT+6,19 SAY EFFDATE
110        ENDIF (COLCNT - (COLCNT * (COLCNT/2)) = 0.00)
111    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
112    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
113        LINECT = 1 + LINECT
114        COLCNT = 1.00
115    ELSE
116        COLCNT = COLCNT + 1.00
117    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
118    STORE EFFDATE TO MOLDATE
119 *
120    DO WHILE ((EFFDATE = MOLDATE) .AND. .NOT. EOF())
121       SKIP+2
122    ENDDO
123 *
124    IF EOF() THEN
125        EXIT
126    ELSE
127        SKIP
128    ENDIF EOF() = .T.
129 ENDDO WHILE SITENO = MSITE
130 *
131 STORE DTOC(DATE()) TO SYSDATE
132 STORE SUBSTR(SYSDATE,7,2) + SUBSTR(SYSDATE,1,2) +;
133       SUBSTR(SYSDATE,4,2) TO MDATE
134 STORE SPACE(17) + 'Input Effective Date  (Range ' + LODATE +;
135       ' to ' + HIDATE + ')' + SPACE(17) TO MESSAGE
136 SET COLOR TO  /W,  /W
137 @ 24,0 SAY MESSAGE
138 SET COLOR TO W+/B, W+/B
139 @ 3,29 SAY "EFFECTIVE DATE: "
140 *
141 USE EQUIP INDEX EQUIPSD.NDX
142 STORE "000000" TO MOLDATE
143 *
144 DO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
145    STORE MDATE TO MOLDATE
146    SET COLOR TO R+/B, R+/B
147    @ 3,45 GET MOLDATE PICT "999999"
148    READ
149    DO WHILE .T.
150        IF .NOT. (SUBSTR(MOLDATE,1,2) > "83" .AND.;
```

```
151                 SUBSTR(MOLDATE,1,2) <= "99") THEN
152             SET COLOR TO W/B, W/B
153             @ 24,0 SAY SPACE(80)
154             SET COLOR TO W+/R, W+/R
155             @ 24,16 SAY " Year portion of date must be between 84 and 99 "
156             DO DELAY
157             SET COLOR TO  /W,  /W
158             @ 24,0 SAY MESSAGE
159             STORE SUBSTR(MDATE,1,2) TO MYEAR
160             SET COLOR TO R+/B, R+/B
161             @ 3,45 GET MYEAR PICT "99"
162             READ
163             STORE MYEAR + SUBSTR(MOLDATE,3,4) TO MOLDATE
164         ELSE
165             EXIT
166         ENDIF
167     ENDDO WHILE .T.
168 *
169     DO WHILE .T.
170         IF .NOT. (SUBSTR(MOLDATE,3,2) >= "01" .AND.;
171                 SUBSTR(MOLDATE,3,2) <= "12") THEN
172             SET COLOR TO W/B, W/B
173             @ 24,0 SAY SPACE(80)
174             SET COLOR TO W+/R, W+/R
175             @ 24,16 SAY " Month portion of date must be between 01 and 12 "
176             DO DELAY
177             SET COLOR TO  /W,  /W
178             @ 24,0 SAY MESSAGE
179             STORE SUBSTR(MDATE,3,2) TO MMONTH
180             SET COLOR TO R+/B, R+/B
181             @ 3,47 GET MMONTH PICT "99"
182             READ
183             STORE SUBSTR(MOLDATE,1,2) + MMONTH +;
184                 SUBSTR(MOLDATE,5,2) TO MOLDATE
185         ELSE
186             EXIT
187         ENDIF
188     ENDDO WHILE .T.
189 *
190     DO WHILE .T.
191     IF ((SUBSTR(MOLDATE,3,2) = "04" .OR. SUBSTR(MOLDATE,3,2) = "06" .OR.;
192         SUBSTR(MOLDATE,3,2) = "09" .OR. SUBSTR(MOLDATE,3,2) = "11") .AND.;
193         .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
194         SUBSTR(MOLDATE,5,2) <= "30")) THEN
195         SET COLOR TO W/B, W/B
196         @ 24,0 SAY SPACE(80)
197         SET COLOR TO W+/R, W+/R
198         @ 24,16 SAY " Day portion of date must be between 01 and 30 "
199         DO DELAY
200         SET COLOR TO  /W,  /W
```

```
201         @ 24,0 SAY MESSAGE
202         STORE SUBSTR(MDATE,5,2) TO MDAY
203         SET COLOR TO R+/B, R+B
204         @ 3,49 GET MDAY PICT "99"
205         READ
206         STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
207         LOOP
208      ELSE
209   *
210      IF (SUBSTR(MOLDATE,3,2) = "02" .AND. .NOT.;
211         (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
212          SUBSTR(MOLDATE,5,2) <= "28")) THEN
213          SET COLOR TO W/B, W/B
214          @ 24,0 SAY SPACE(80)
215          SET COLOR TO W+/R, W+/R
216          @ 24,16 SAY " Day portion of date must be between 01 and 28 "
217          DO DELAY
218          SET COLOR TO  /W,  /W
219          @ 24,0 SAY MESSAGE
220          STORE SUBSTR(MDATE,5,2) TO MDAY
221          SET COLOR TO R+/B, R+B
222          @ 3,49 GET MDAY PICT "99"
223          READ
224          STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
225          LOOP
226      ELSE
227   *
228      IF .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
229                SUBSTR(MOLDATE,5,2) <= "31") THEN
230          SET COLOR TO W/B, W/B
231          @ 24,0 SAY SPACE(80)
232          SET COLOR TO W+/R, W+/R
233          @ 24,16 SAY " Day portion of date must be between 01 and 31 "
234          DO DELAY
235          SET COLOR TO  /W,  /W
236          @ 24,0 SAY MESSAGE
237          STORE SUBSTR(MDATE,5,2) TO MDAY
238          SET COLOR TO R+/B, R+B
239          @ 3,49 GET MDAY PICT "99"
240          READ
241          STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
242          LOOP
243      ELSE
244          EXIT
245      ENDIF
246      ENDIF
247      ENDIF
248      ENDDO WHILE .T.
249   *
250      GO TOP
```

```
251     FIND &MOLDATE
252     IF EOF() = .T. THEN
253         SET COLOR TO W/B, W/B
254         @ 24,0 SAY SPACE(80)
255         STORE " EFFECTIVE DATE " + MOLDATE + " does not exist for site " +;
256               MSITE + ", try another " TO NODATE
257         SET COLOR TO W+/R, W+/R
258         @ 24,06 SAY NODATE
259         DO DELAY
260         SET COLOR TO  /W,  /W
261         @ 24,0 SAY MESSAGE
262         STORE "000000" TO MOLDATE
263         LOOP
264     ENDIF EOF() = .T.
265 ENDDO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
266 *
267 SET COLOR TO W+/B, W+/B
268 @ 05,05 SAY SPACE(70)
269 @ 24,0 SAY SPACE(80)
270 *
271 *  CLEAR LISTING OF EFFECTIVE DATES FROM SCREEN
272 *
273 SET COLOR TO  /BR,  /BR
274 @ 07,2 SAY SPACE(76)
275 @ 08,2 SAY SPACE(76)
276 @ 09,2 SAY SPACE(76)
277 @ 10,2 SAY SPACE(76)
278 @ 11,2 SAY SPACE(76)
279 @ 12,2 SAY SPACE(76)
280 @ 13,2 SAY SPACE(76)
281 @ 14,2 SAY SPACE(76)
282 @ 15,2 SAY SPACE(76)
283 @ 16,2 SAY SPACE(76)
284 @ 17,2 SAY SPACE(76)
285 @ 18,2 SAY SPACE(76)
286 @ 19,2 SAY SPACE(76)
287 @ 20,2 SAY SPACE(76)
288 @ 21,2 SAY SPACE(76)
289 *
290 SET COLOR TO R+/ , R+/
291 @ 13,18 SAY " CREATING TEMPORARY DATABASE AND INDEX FILE "
292 STORE "MOLDATE" + "MSITE" TO MKEY
293 GO TOP
294 FIND &MKEY
295 *
296 COPY TO TEMPONE FOR SITENO = "&MSITE" .AND. EFFDATE = "&MOLDATE"
297 SELECT 1
298 USE TEMPONE
299 INDEX ON FEATURENO TO TEMPONE
300 SELECT 2
```

```
USE DESCRIP INDEX DESCRIP
SELECT TEMPONE
SET RELATION TO FEATURENO INTO DESCRIP
GO TOP
*
*   CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
*   IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
@ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
SET COLOR TO  /BR,  /BR
@ 13,49 SAY "Y"
@ 13,56 SAY "N"
STORE "N" TO ACCEPT
@ 13,62 GET ACCEPT PICT "!"
READ
*
*   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
*
DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
    IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
        SET COLOR TO W+/R, W+/R
        @ 24,24 SAY " Response must be either N or Y "
        DO DELAY
        STORE "N" TO ACCEPT
    ENDIF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
    SET COLOR TO  /BR,  /BR
    @ 13,62 GET ACCEPT PICT "!"
    READ
ENDDO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
*
SET COLOR TO  /BR,  /BR
@ 13,15 SAY SPACE(55)
*
IF ACCEPT = "Y" THEN
   ?? FLASH + "W.PRINTER/"
   SET CONSOLE OFF
   WAIT TO CHOICE
   SET CONSOLE ON
   SET COLOR TO W/B, W/B
   @ 22,10 SAY SPACE(65)
   STORE DTOC(DATE()) TO TODAY
   STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
         SUBSTR(TODAY,7,2) TO TODATE
   STORE 0 TO PAGENO
   STORE 61 TO LINECT
   SET COLOR TO R+/ , R+/
   SET DEVICE TO PRINT
*
```

```
351     DO WHILE .NOT. EOF()
352         DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
353              @ LINECT,3  SAY SITENO PICT "99"
354              @ LINECT,9  SAY B->CLIN PICT "9999"
355              @ LINECT,17 SAY FEATURENO PICT "999999"
356              @ LINECT,28 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!"
357              @ LINECT,60 SAY QTY PICT "999"
358              @ LINECT,67 SAY B->FDCMODEL PICT "!!!!!!!!!!"
359              LINECT = LINECT + 1
360              SKIP
361         ENDDO WHILE (LINECT <= 60 .AND. .NOT. EOF())
362 *
363         IF EOF() = .T. THEN
364             IF PAGENO > 1 THEN
365                 @ 62,37 SAY "Page " + STR(PAGENO,2,0)
366             ENDIF PAGENO > 1
367             EJECT
368             SET DEVICE TO SCREEN
369             @ 13,25 SAY " FINISHED PRINTING THE REPORT "
370             DO DELAY
371             EXIT
372         ELSE
373             SET DEVICE TO SCREEN
374             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
375             SET DEVICE TO PRINT
376         ENDIF EOF() = .T.
377 *
378         IF (LINECT > 60 .AND. PAGENO > 1) THEN
379             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
380         ENDIF (LINECT > 60 .AND. PAGENO > 1)
381         @ 2,25 SAY " DELIVERY ORDER LEVEL REPORT "
382         @ 3,29 SAY "EFFECTIVE DATE: "
383         @ 3,45 SAY MOLDATE
384         @ 4,60 SAY TODATE
385         @ 6,2  SAY "SITE   CLIN   FEATURE#            DESCRIPTION"
386         @ 6,60 SAY "QTY   MODEL NUMBER"
387         @ 7,2  SAY "================================================="
388         @ 7,51 SAY "============================"
389         PAGENO = PAGENO + 1
390         STORE 9 TO LINECT
391 *
392     ENDDO WHILE .NOT. EOF()
393 ELSE
394     SET COLOR TO GR+/B, GR+/B
395     @ 5,2  SAY "SITE   CLIN   FEATURE#            DESCRIPTION"
396     @ 5,60 SAY "QTY   MODEL NUMBER"
397     SET COLOR TO  /BR,  /BR
398     STORE 0 TO LINECT
399 *
400     DO WHILE .NOT. EOF()
```

```
401         DO WHILE LINECT < 15
402             @ LINECT+7,3  SAY SITENO PICT "99"
403             @ LINECT+7,9  SAY B->CLIN PICT "9999"
404             @ LINECT+7,17 SAY FEATURENO PICT "999999"
405             @ LINECT+7,28 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!"
406             @ LINECT+7,60 SAY QTY PICT "999"
407             @ LINECT+7,67 SAY B->FDCMODEL PICT "!!!!!!!!!!"
408             LINECT = LINECT + 1
409             SKIP
410             IF EOF() = .T. THEN
411                 SET COLOR TO W+/R, W+/R
412                 @ 24,18 SAY " End of File reached, Press any key to EXIT "
413                 SET CONSOLE OFF
414                 WAIT TO ACCEPT
415                 SET CONSOLE ON
416                 EXIT
417             ENDIF EOF() = .T.
418         ENDDO WHILE LINECT < 15
419 *
420         IF EOF() = .T. THEN
421             EXIT
422         ENDIF EOF() = .T.
423         SET COLOR TO R+/B, R+/B
424         STORE "C" TO CHOICE
425         @ 22,57 GET CHOICE PICT "!"
426         READ
427 *
428 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
429 *
430         DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
431             IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
432                 SET COLOR TO W+/R, W+/R
433                 @ 24,24 SAY " Response must be either C or X "
434                 DO DELAY
435                 STORE "C" TO CHOICE
436             ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
437             SET COLOR TO R+/B, R+/B
438             @ 22,57 GET CHOICE PICT "!"
439             READ
440         ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
441 *
442 *       DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
443 *
444         IF CHOICE = "C"
445             SET COLOR TO  /BR,  /BR
446             @ 07,2 SAY SPACE(76)
447             @ 08,2 SAY SPACE(76)
448             @ 09,2 SAY SPACE(76)
449             @ 10,2 SAY SPACE(76)
450             @ 11,2 SAY SPACE(76)
```

```
451             @ 12,2 SAY SPACE(76)
452             @ 13,2 SAY SPACE(76)
453             @ 14,2 SAY SPACE(76)
454             @ 15,2 SAY SPACE(76)
455             @ 16,2 SAY SPACE(76)
456             @ 17,2 SAY SPACE(76)
457             @ 18,2 SAY SPACE(76)
458             @ 19,2 SAY SPACE(76)
459             @ 20,2 SAY SPACE(76)
460             @ 21,2 SAY SPACE(76)
461             STORE 0 TO LINECT
462         ELSE
463             EXIT
464         ENDIF CHOICE = "C"
465 *
466     ENDDO WHILE .NOT. EOF()
467 *
468 ENDIF ACCEPT = "Y"
469 *
470 *  ERASE ALL TEMPORARY FILES CREATED DURING REPORT GENERATION
471 *
472 CLOSE DATABASES
473 SET CONSOLE OFF
474 ERASE TEMPONE.DBF
475 ERASE TEMPONE.NDX
476 SET CONSOLE ON
477 SET PRINT OFF
478 *
479 *  RETURN TO CALLING PROGRAM
480 *
481 RELEASE ALL LIKE M*, ACCEPT, CHOICE, COLCNT, ERROR, LINECT, PAGENO,;
482          SYSDATE, TODAY, TODATE
483 RETURN
484 ************************************************************************
```

Page 1 EQPDTPRC.PRG Program Listing

```
1  * PROCEDURE EQPDTPRC.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE EQUIPMENT DELIVERY
9  *                   ORDER DATE LEVEL REPORT WITH UNIT COSTS.
10 *
11 * INPUT FILES     : EQUIP.DBF, EQUIPSD.NDX, DESCRIP.DBF, DESCRIP.NDX,
12 *                   EQUIPSIT.NDX
13 *
14 * OUTPUT FILES    : TEMPONE.DBF, TEMPONE.NDX
15 *
16 * MODULES CALLED : DELAY.PRG
17 *
18 * GLOBAL VARIABLE: HIDATE, HISITE, LODATE, LOSITE
19 *
20 * LOCAL VARIABLES: ACCEPT, CHOICE, COLCNT, ERROR, LINECT, MKEY, MNEWDATE,
21 *                  MOLDATE, MSITE, PAGENO, SYSDATE, TODAY, TODATE
22 *
23 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
24 *
25 * CASE SELECTION = 1    EQUIPMENT EFFECTIVE DELIVERY ORDER REPORT
26 *                       WITH UNIT COST
27 *
28 * CALL EQUIPMENT DATABASE INDEXED ON SITE NUMBER.  DISPLAY ALL
29 * EFFECTIVE DATES OF DELIVERY ORDERS FOR THE USER TO SELECT FROM.
30 * CALL EQUIPMENT DATABASE INDEXED ON EFFECTIVE DELIVERY ORDER DATE
31 * AND SITE NUMBER. COPY APPLICABLE RECORDS TO TEMPONE, INDEXED ON
32 * FEATURE NUMBER.  RELATE TO DESCRIPTION FILE.
33 *
34 SET ESCAPE OFF
35 SET TALK OFF
36 SET COLOR TO W+/B, W+/B, B
37 CLEAR
38 USE EQUIP
39 GO TOP
40 IF EOF() = .T. THEN
41    SET COLOR TO W+/R, W+/R
42    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
43    DO DELAY
44    RETURN
45 ENDIF
46 ?? FLASH + "S.REPORTS.SCR/"
47 @ 24,0 SAY SPACE(80)
48 SET COLOR TO R+/ , R+/
49 @ 2,25 SAY " DELIVERY ORDER LEVEL REPORT "
50 SET COLOR TO W+/BR, W+/BR
```

```
@ 13,15 SAY "Enter site number for which the report is desired:"
*
*  ENSURE THAT TEMPORARY DATABASE AND INDEX DO NOT EXIST, IF SO ERASE THEM
*
SET CONSOLE OFF
ERASE TEMPONE.DBF
ERASE TEMPONE.NDX
SET CONSOLE ON
USE EQUIP INDEX EQUIPSIT
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No equipment exists for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,15 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .T.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
*
SET COLOR TO W+/B, W+/B
@ 05,09 SAY "The following Delivery Order Effective Dates exist for Site"
@ 05,69 SAY MSITE
SET COLOR TO  /BR,  /BR
@ 13,05 SAY SPACE(70)
STORE 1 TO LINECT
STORE 1.00 TO COLCNT
STORE "000000" TO MOLDATE
*
```

```
101 DO WHILE SITENO = MSITE
102    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
103        @LINECT+6,57 SAY EFFDATE
104    ELSE
105        IF (COLCNT - (COLCNT * (COLCNT/2)) = 0.00) THEN
106            @LINECT+6,38 SAY EFFDATE
107        ELSE
108            @LINECT+6,19 SAY EFFDATE
109        ENDIF (COLCNT - (COLCNT * (COLCNT/2)) = 0.00)
110    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
111    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
112        LINECT = 1 + LINECT
113        COLCNT = 1.00
114    ELSE
115        COLCNT = COLCNT + 1.00
116    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
117    STORE EFFDATE TO MOLDATE
118 *
119    DO WHILE ((EFFDATE = MOLDATE) .AND. .NOT. EOF())
120       SKIP+2
121    ENDDO
122 *
123    IF EOF() THEN
124        EXIT
125    ELSE
126        SKIP
127    ENDIF EOF() = .T.
128 ENDDO WHILE SITENO = MSITE
129 *
130 STORE DTOC(DATE()) TO SYSDATE
131 STORE SUBSTR(SYSDATE,7,2) + SUBSTR(SYSDATE,1,2) +;
132       SUBSTR(SYSDATE,4,2) TO MDATE
133 STORE SPACE(17) + 'Input Effective Date  (Range ' + LODATE +;
134       ' to ' + HIDATE + ')' + SPACE(17) TO MESSAGE
135 SET COLOR TO  /W,  /W
136 @ 24,0 SAY MESSAGE
137 SET COLOR TO W+/B, W+/B
138 @ 3,29 SAY "EFFECTIVE DATE: "
139 *
140 USE EQUIP INDEX EQUIPSD.NDX
141 STORE "000000" TO MOLDATE
142 *
143 DO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
144    STORE MDATE TO MOLDATE
145    SET COLOR TO R+/B, R+/B
146    @ 3,45 GET MOLDATE PICT "999999"
147    READ
148    DO WHILE .T.
149        IF .NOT. (SUBSTR(MOLDATE,1,2) > "83" .AND.;
150                  SUBSTR(MOLDATE,1,2) <= "99") THEN
```

```
151             SET COLOR TO W/B, W/B
152             @ 24,0 SAY SPACE(80)
153             SET COLOR TO W+/R, W+/R
154             @ 24,16 SAY " Year portion of date must be between 84 and 99 "
155             DO DELAY
156             SET COLOR TO  /W,  /W
157             @ 24,0 SAY MESSAGE
158             STORE SUBSTR(MDATE,1,2) TO MYEAR
159             SET COLOR TO R+/B, R+/B
160             @ 3,45 GET MYEAR PICT "99"
161             READ
162             STORE MYEAR + SUBSTR(MOLDATE,3,4) TO MOLDATE
163         ELSE
164             EXIT
165         ENDIF
166     ENDDO
167 *
168     DO WHILE .T.
169         IF .NOT. (SUBSTR(MOLDATE,3,2) > "00" .AND.;
170                   SUBSTR(MOLDATE,3,2) < "13") THEN
171             SET COLOR TO W/B, W/B
172             @ 24,0 SAY SPACE(80)
173             SET COLOR TO W+/R, W+/R
174             @ 24,16 SAY " Month portion of date must be between 01 and 12 "
175             DO DELAY
176             SET COLOR TO  /W,  /W
177             @ 24,0 SAY MESSAGE
178             STORE SUBSTR(MDATE,3,2) TO MMONTH
179             SET COLOR TO R+/B, R+/B
180             @ 3,47 GET MMONTH PICT "99"
181             READ
182             STORE SUBSTR(MOLDATE,1,2) + MMONTH +;
183                   SUBSTR(MOLDATE,5,2) TO MOLDATE
184         ELSE
185             EXIT
186         ENDIF
187     ENDDO
188 *
189     DO WHILE .T.
190     IF ((SUBSTR(MOLDATE,3,2) = "04" .OR. SUBSTR(MOLDATE,3,2) = "06" .OR.;
191         SUBSTR(MOLDATE,3,2) = "09" .OR. SUBSTR(MOLDATE,3,2) = "11") .AND.;
192         .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
193         SUBSTR(MOLDATE,5,2) <= "30")) THEN
194         SET COLOR TO W/B, W/B
195         @ 24,0 SAY SPACE(80)
196         SET COLOR TO W+/R, W+/R
197         @ 24,16 SAY " Day portion of date must be between 01 and 30 "
198         DO DELAY
199         SET COLOR TO  /W,  /W
200         @ 24,0 SAY MESSAGE
```

```
201         STORE SUBSTR(MDATE,5,2) TO MDAY
202         SET COLOR TO R+/B, R+B
203         @ 3,49 GET MDAY PICT "99"
204         READ
205         STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
206         LOOP
207      ELSE
208   *
209      IF (SUBSTR(MOLDATE,3,2) = "02" .AND. .NOT.;
210         (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
211          SUBSTR(MOLDATE,5,2) <= "28")) THEN
212          SET COLOR TO W/B, W/B
213          @ 24,0 SAY SPACE(80)
214          SET COLOR TO W+/R, W+/R
215          @ 24,16 SAY " Day portion of date must be between 01 and 28 "
216          DO DELAY
217          SET COLOR TO  /W,  /W
218          @ 24,0 SAY MESSAGE
219          STORE SUBSTR(MDATE,5,2) TO MDAY
220          SET COLOR TO R+/B, R+B
221          @ 3,49 GET MDAY PICT "99"
222          READ
223          STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
224          LOOP
225      ELSE
226   *
227      IF .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
228                SUBSTR(MOLDATE,5,2) <= "31") THEN
229          SET COLOR TO W/B, W/B
230          @ 24,0 SAY SPACE(80)
231          SET COLOR TO W+/R, W+/R
232          @ 24,16 SAY " Day portion of date must be between 01 and 31 "
233          DO DELAY
234          SET COLOR TO  /W,  /W
235          @ 24,0 SAY MESSAGE
236          STORE SUBSTR(MDATE,5,2) TO MDAY
237          SET COLOR TO R+/B, R+B
238          @ 3,49 GET MDAY PICT "99"
239          READ
240          STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
241          LOOP
242      ELSE
243          EXIT
244      ENDIF
245      ENDIF
246      ENDIF
247      ENDDO WHILE .T.
248   *
249      GO TOP
250      FIND &MOLDATE
```

```
251     IF EOF() = .T. THEN
252         SET COLOR TO W/B, W/B
253         @ 24,0 SAY SPACE(80)
254         STORE " EFFECTIVE DATE " + MOLDATE + " does not exist for site " +;
255               MSITE + ", try another " TO NODATE
256         SET COLOR TO W+/R, W+/R
257         @ 24,06 SAY NODATE
258         DO DELAY
259         SET COLOR TO  /W,  /W
260         @ 24,0 SAY MESSAGE
261         STORE "000000" TO MOLDATE
262         LOOP
263     ELSE
264         EXIT
265     ENDIF EOF() = .T.
266 ENDDO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
267 *
268 SET COLOR TO W+/B, W+/B
269 @ 05,05 SAY SPACE(70)
270 @ 24,0 SAY SPACE(80)
271 *
272 *  CLEAR LISTING OF EFFECTIVE DATES FROM SCREEN
273 *
274 SET COLOR TO  /BR,  /BR
275 @ 07,2 SAY SPACE(76)
276 @ 08,2 SAY SPACE(76)
277 @ 09,2 SAY SPACE(76)
278 @ 10,2 SAY SPACE(76)
279 @ 11,2 SAY SPACE(76)
280 @ 12,2 SAY SPACE(76)
281 @ 13,2 SAY SPACE(76)
282 @ 14,2 SAY SPACE(76)
283 @ 15,2 SAY SPACE(76)
284 @ 16,2 SAY SPACE(76)
285 @ 17,2 SAY SPACE(76)
286 @ 18,2 SAY SPACE(76)
287 @ 19,2 SAY SPACE(76)
288 @ 20,2 SAY SPACE(76)
289 @ 21,2 SAY SPACE(76)
290 *
291 SET COLOR TO R+/ , R+/
292 @ 13,18 SAY " CREATING TEMPORARY DATABASE AND INDEX FILE "
293 STORE "MOLDATE" + "MSITE" TO MKEY
294 GO TOP
295 FIND &MKEY
296 *
297 COPY TO TEMPONE FOR SITENO = "&MSITE" .AND. EFFDATE = "&MOLDATE"
298 SELECT 1
299 USE TEMPONE
300 INDEX ON FEATURENO TO TEMPONE
```

```
SELECT 2
USE DESCRIP INDEX DESCRIP
SELECT TEMPONE
SET RELATION TO FEATURENO INTO DESCRIP
GO TOP
*
*   CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
*   IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
@ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
SET COLOR TO  /BR,  /BR
@ 13,49 SAY "Y"
@ 13,56 SAY "N"
STORE "N" TO ACCEPT
@ 13,62 GET ACCEPT PICT "!"
READ
*
*   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
*
DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
    IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
        SET COLOR TO W+/R, W+/R
        @ 24,24 SAY " Response must be either N or Y "
        DO DELAY
        STORE "N" TO ACCEPT
    ENDIF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
    SET COLOR TO  /BR,  /BR
    @ 13,62 GET ACCEPT PICT "!"
    READ
ENDDO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
*
SET COLOR TO  /BR,  /BR
@ 13,15 SAY SPACE(55)
*
IF ACCEPT = "Y" THEN
   ?? FLASH + "W.PRINTER/"
   SET CONSOLE OFF
   WAIT TO CHOICE
   SET CONSOLE ON
   SET COLOR TO W/B, W/B
   @ 22,10 SAY SPACE(65)
   STORE DTOC(DATE()) TO TODAY
   STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
         SUBSTR(TODAY,7,2) TO TODATE
   STORE 0 TO PAGENO
   STORE 61 TO LINECT
   SET COLOR TO R+/ , R+/
   SET DEVICE TO PRINT
```

```
*
   DO WHILE .NOT. EOF()
       DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
            @ LINECT,3  SAY SITENO PICT "99"
            @ LINECT,9  SAY B->CLIN PICT "9999"
            @ LINECT,17 SAY FEATURENO PICT "999999"
            @ LINECT,28 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!"
            @ LINECT,60 SAY QTY PICT "999"
            @ LINECT,66 SAY UNIT_PRICE PICT "99999999.99"
            LINECT = LINECT + 1
            SKIP
       ENDDO WHILE (LINECT <= 60 .AND. .NOT. EOF())
*
       IF EOF() = .T. THEN
           IF PAGENO > 1 THEN
               @ 62,37 SAY "Page " + STR(PAGENO,2,0)
           ENDIF PAGENO > 1
           EJECT
           SET DEVICE TO SCREEN
           @ 13,25 SAY " FINISHED PRINTING THE REPORT "
           DO DELAY
           EXIT
       ELSE
           SET DEVICE TO SCREEN
           @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
           SET DEVICE TO PRINT
       ENDIF EOF() = .T.
*
       IF (LINECT > 60 .AND. PAGENO > 1) THEN
           @ 62,37 SAY "Page " + STR(PAGENO,2,0)
       ENDIF (LINECT > 60 .AND. PAGENO > 1)
       @ 2,25 SAY " DELIVERY ORDER LEVEL REPORT "
       @ 3,29 SAY "EFFECTIVE DATE: "
       @ 3,45 SAY MOLDATE
       @ 4,60 SAY TODATE
       @ 6,2  SAY "SITE   CLIN   FEATURE#            DESCRIPTION"
       @ 6,60 SAY "QTY    UNIT PRICE "
       @ 7,2  SAY "================================================="
       @ 7,51 SAY "============================"
       PAGENO = PAGENO + 1
       STORE 9 TO LINECT
*
   ENDDO WHILE .NOT. EOF()
ELSE
   SET COLOR TO GR+/B, GR+/B
   @ 5,2  SAY "SITE   CLIN   FEATURE#            DESCRIPTION"
   @ 5,60 SAY "QTY    UNIT PRICE "
   SET COLOR TO  /BR,  /BR
   STORE 0 TO LINECT
*
```

```
401     DO WHILE .NOT. EOF()
402        DO WHILE LINECT < 15
403            @ LINECT+7,3  SAY SITENO PICT "99"
404            @ LINECT+7,9  SAY B->CLIN PICT "9999"
405            @ LINECT+7,17 SAY FEATURENO PICT "999999"
406            @ LINECT+7,28 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!"
407            @ LINECT+7,60 SAY QTY PICT "999"
408            @ LINECT+7,66 SAY UNIT_PRICE PICT "99999999.99"
409            LINECT = LINECT + 1
410            SKIP
411            IF EOF() = .T. THEN
412                SET COLOR TO W+/R, W+/R
413                @ 24,18 SAY " End of File reached, Press any key to EXIT "
414                SET CONSOLE OFF
415                WAIT TO ACCEPT
416                SET CONSOLE ON
417                EXIT
418            ENDIF EOF() = .T.
419        ENDDO WHILE LINECT < 15
420 *
421        IF EOF() = .T. THEN
422            EXIT
423        ENDIF EOF() = .T.
424        SET COLOR TO R+/B, R+/B
425        STORE "C" TO CHOICE
426        @ 22,57 GET CHOICE PICT "!"
427        READ
428 *
429 *      ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
430 *
431        DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
432            IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
433                SET COLOR TO W+/R, W+/R
434                @ 24,24 SAY " Response must be either C or X "
435                DO DELAY
436                STORE "C" TO CHOICE
437            ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
438            SET COLOR TO R+/B, R+/B
439            @ 22,57 GET CHOICE PICT "!"
440            READ
441        ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
442 *
443 *      DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
444 *
445        IF CHOICE = "C"
446            SET COLOR TO  /BR,  /BR
447            @ 07,2 SAY SPACE(76)
448            @ 08,2 SAY SPACE(76)
449            @ 09,2 SAY SPACE(76)
450            @ 10,2 SAY SPACE(76)
```

```
451             @ 11,2 SAY SPACE(76)
452             @ 12,2 SAY SPACE(76)
453             @ 13,2 SAY SPACE(76)
454             @ 14,2 SAY SPACE(76)
455             @ 15,2 SAY SPACE(76)
456             @ 16,2 SAY SPACE(76)
457             @ 17,2 SAY SPACE(76)
458             @ 18,2 SAY SPACE(76)
459             @ 19,2 SAY SPACE(76)
460             @ 20,2 SAY SPACE(76)
461             @ 21,2 SAY SPACE(76)
462             STORE 0 TO LINECT
463          ELSE
464              EXIT
465          ENDIF CHOICE = "C"
466   *
467      ENDDO WHILE .NOT. EOF()
468   *
469   ENDIF ACCEPT = "Y"
470   *
471   *  ERASE ALL TEMPORARY FILES CREATED DURING REPORT GENERATION
472   *
473   CLOSE DATABASES
474   SET CONSOLE OFF
475   ERASE TEMPONE.DBF
476   ERASE TEMPONE.NDX
477   SET CONSOLE ON
478   SET PRINT OFF
479   *
480   *  RETURN TO CALLING PROGRAM
481   *
482   RELEASE ALL LIKE M*, ACCEPT, CHOICE, COLCNT, ERROR, LINECT, PAGENO,;
483           SYSDATE, TODAY, TODATE
484   RETURN
485   ************************************************************************
```

Page 1 EQPPJRPT.PRG Program Listing

```
1  * PROCEDURE EQPPJRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE EQUIPMENT
9  *                   PROJECT LEVEL REPORT.
10 *
11 * INPUT FILES     : EQUIP.DBF, DESCRIP.DBF, DECSRIP.NDX,
12 *                   TEMPONE.DBF, EFEAT.NDX
13 *
14 * OUTPUT FILE     : TEMPONE.DBF
15 *
16 * CALLED BY       : PROJRPTS.PRG
17 *
18 * MODULES CALLED  : DELAY.PRG
19 *
20 * LOCAL VARIABLES: ACCEPT, CHOICE, LINECT, PAGENO, TODAY, TODATE
21 *
22 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
23 *
24 * CASE SELECTION = 1    EQUIPMENT PROJECT LEVEL REPORT
25 *
26 * CALL EQUIPMENT DATABASE INDEXED ON CONTRACT LINE NUMBER AND FEATURE
27 * NUMBER AND TOTAL ON QUANTITY.  RELATE TO DESCRIP FILE ON FEATURENO.
28 *
29 SET ESCAPE OFF
30 SET TALK OFF
31 SET COLOR TO W+/B, W+/B, B
32 CLEAR
33 USE EQUIP
34 GO TOP
35 IF EOF() = .T. THEN
36    SET COLOR TO W+/R, W+/R
37    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
38    DO DELAY
39    RETURN
40 ENDIF
41 ?? FLASH + "S.REPORTS.SCR/"
42 @ 24,0 SAY SPACE(80)
43 SET COLOR TO R+/ , R+/
44 @ 2,25 SAY " EQUIPMENT PROJECT LEVEL REPORT "
45 *
46 *  CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
47 *  IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
48 *
49 SET COLOR TO W+/BR, W+/BR
50 @ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
```

```
SET COLOR TO  /BR,  /BR
@ 13,49 SAY "Y"
@ 13,56 SAY "N"
STORE "N" TO ACCEPT
@ 13,62 GET ACCEPT PICT "!"
READ
*
*   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
*
DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
    IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
        SET COLOR TO W+/R, W+/R
        @ 24,24 SAY " Response must be either N or Y "
        DO DELAY
        STORE "N" TO ACCEPT
    ENDIF
    SET COLOR TO  /BR,  /BR
    @ 13,62 GET ACCEPT PICT "!"
    READ
ENDDO
*
SET COLOR TO  /BR,  /BR
@ 13,15 SAY SPACE(55)
*
SET COLOR TO W+/BR, W+/BR
@ 13,19 SAY " COMPUTING TOTALS FOR EACH FEATURE NUMBER "
*
USE EQUIP INDEX EFEAT
GO TOP
SET CONSOLE OFF
ERASE TEMPONE.DBF
SET CONSOLE ON
*
*  COMPUTE THE TOTAL QUANTITY FOR EACH FEATURE NUMBER
*
TOTAL ON FEATURENO TO TEMPONE.DBF FIELDS QTY WHILE FEATURENO <> 'XXXXXX'
*
SELECT 1
USE TEMPONE
SELECT 2
USE DESCRIP INDEX DESCRIP
SELECT TEMPONE
SET RELATION TO FEATURENO INTO DESCRIP
GO TOP
*
@ 13,15 SAY SPACE(55)
*
IF ACCEPT = "Y" THEN
   ?? FLASH + "W.PRINTER/"
   SET CONSOLE OFF
```

```
101     WAIT TO CHOICE
102     SET CONSOLE ON
103     SET COLOR TO W/B, W/B
104     @ 22,10 SAY SPACE(65)
105     STORE DTOC(DATE()) TO TODAY
106     STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
107           SUBSTR(TODAY,7,2) TO TODATE
108     STORE 0 TO PAGENO
109     STORE 61 TO LINECT
110     SET COLOR TO R+/ , R+/
111     SET DEVICE TO PRINT
112  *
113     DO WHILE .NOT. EOF()
114         DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
115             @ LINECT,10 SAY DESCRIP->CLIN
116             @ LINECT,22 SAY FEATURENO
117             @ LINECT,35 SAY DESCRIP->DESCIPT
118             @ LINECT,68 SAY QTY
119             LINECT = LINECT + 1
120             SKIP
121         ENDDO WHILE
122  *
123         IF EOF() = .T. THEN
124             IF PAGENO > 1 THEN
125                 @ 62,37 SAY "Page " + STR(PAGENO,2,0)
126             ENDIF
127             EJECT
128             SET DEVICE TO SCREEN
129             @ 13,25 SAY " FINISHED PRINTING THE REPORT "
130             DO DELAY
131             EXIT
132         ELSE
133             SET DEVICE TO SCREEN
134             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
135             SET DEVICE TO PRINT
136         ENDIF
137  *
138         IF (LINECT > 60 .AND. PAGENO > 1) THEN
139             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
140         ENDIF
141         @ 2,25 SAY " EQUIPMENT PROJECT LEVEL REPORT "
142         @ 4,60 SAY TODATE
143         @ 6,10 SAY "CLIN       FEATURE#              DESCRIPTION"
144         @ 6,68 SAY "QTY"
145         @ 7,2  SAY "================================================="
146         @ 7,51 SAY "============================"
147         PAGENO = PAGENO + 1
148         STORE 9 TO LINECT
149  *
150     ENDDO WHILE .NOT. EOF()
```

```
151 *
152 ELSE
153    SET COLOR TO GR+/B, GR+/B
154    @ 5,10 SAY "CLIN       FEATURE#              DESCRIPTION"
155    @ 5,68 SAY "QTY"
156    SET COLOR TO  /BR,  /BR
157    STORE 0 TO LINECT
158 *
159    DO WHILE .NOT. EOF()
160       DO WHILE LINECT < 15
161           @ LINECT+7,10 SAY DESCRIP->CLIN
162           @ LINECT+7,22 SAY FEATURENO
163           @ LINECT+7,35 SAY DESCRIP->DESCIPT
164           @ LINECT+7,68 SAY QTY
165           LINECT = LINECT + 1
166           SKIP
167           IF EOF() = .T. THEN
168               SET COLOR TO W+/R, W+/R
169               @ 24,18 SAY " End of File reached, Press any key to EXIT "
170               SET CONSOLE OFF
171               WAIT TO ACCEPT
172               SET CONSOLE ON
173               EXIT
174           ENDIF
175        ENDDO WHILE LINECT < 15
176 *
177       IF EOF() = .T. THEN
178           EXIT
179       ENDIF
180       SET COLOR TO R+/B, R+/B
181       STORE "C" TO CHOICE
182       @ 22,57 GET CHOICE PICT "!"
183       READ
184 *
185 *     ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
186 *
187       DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
188           IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
189               SET COLOR TO W+/R, W+/R
190               @ 24,24 SAY " Response must be either C or X "
191               DO DELAY
192               STORE "C" TO CHOICE
193           ENDIF
194           SET COLOR TO R+/B, R+/B
195           @ 22,57 GET CHOICE PICT "!"
196           READ
197       ENDDO
198 *
199 *     DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
200 *
```

```
201         IF CHOICE = "C"
202             SET COLOR TO  /BR,  /BR
203             @ 07,2 SAY SPACE(76)
204             @ 08,2 SAY SPACE(76)
205             @ 09,2 SAY SPACE(76)
206             @ 10,2 SAY SPACE(76)
207             @ 11,2 SAY SPACE(76)
208             @ 12,2 SAY SPACE(76)
209             @ 13,2 SAY SPACE(76)
210             @ 14,2 SAY SPACE(76)
211             @ 15,2 SAY SPACE(76)
212             @ 16,2 SAY SPACE(76)
213             @ 17,2 SAY SPACE(76)
214             @ 18,2 SAY SPACE(76)
215             @ 19,2 SAY SPACE(76)
216             @ 20,2 SAY SPACE(76)
217             @ 21,2 SAY SPACE(76)
218             STORE 0 TO LINECT
219          ELSE
220             EXIT
221          ENDIF
222  *
223     ENDDO WHILE .NOT. EOF()
224  *.
225  ENDIF
226  *
227  *  ERASE THE TEMPORARY DATABASE USED FOR TOTALS
228  *
229  CLOSE DATABASES
230  SET CONSOLE OFF
231  ERASE TEMPONE.DBF
232  SET CONSOLE ON
233  SET PRINT OFF
234  *
235  * RETURN TO CALLING PROGRAM
236  *
237  RELEASE ACCEPT, CHOICE, LINECT, PAGENO, TODAY, TODATE
238  RETURN
239  ************************************************************************
```

```
1  * PROCEDURE EQPSTRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE EQUIPMENT SITE
9  *                   LEVEL REPORT FOR A SINGLE SITE.
10 *
11 * INPUT FILES     : EQUIP.DBF, EFEAT.NDX, DESCRIP.DBF, DESCRIP.NDX,
12 *                   TEMPONE.DBF, EQUIPSIT.NDX
13 *
14 * OUTPUT FILES    : NONE.
15 *
16 * CALLED BY       : SITERPTS.PRG
17
18 * MODULES CALLED : DELAY.PRG
19 *
20 * GLOBAL VARIABLE: HISITE, LOSITE
21 *
22 * LOCAL VARIABLES: ACCEPT, CHOICE, ERROR, LINECT, MESSAGE, MSITE,
23 *                   PAGENO, TODAY, TODATE
24 *
25 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
26 *
27 * CASE SELECTION = 1    EQUIPMENT SITE LEVEL REPORT
28 *
29 * CALL EQUIPMENT DATABASE INDEXED ON SITE NUMBER, CONTRACT LINE NUMBER
30 * AND FEATURE NUMBER AND TOTAL ON QUANTITY.
31 *
32 SET ESCAPE OFF
33 SET TALK OFF
34 SET COLOR TO W+/B, W+/B, B
35 CLEAR
36 USE EQUIP
37 GO TOP
38 IF EOF() = .T. THEN
39    SET COLOR TO W+/R, W+/R
40    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
41    DO DELAY
42    RETURN
43 ENDIF
44 ?? FLASH + "S.REPORTS.SCR/"
45 @ 24,0 SAY SPACE(80)
46 SET COLOR TO R+/ , R+/
47 @ 2,26 SAY " EQUIPMENT SITE LEVEL REPORT "
48 *
49 *  ENSURE THAT TEMPORARY DATABASE DOES NOT EXIST, IF SO ERASE IT
50 *
```

```
SET CONSOLE OFF
ERASE TEMPONE.DBF
SET CONSOLE ON
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY "Enter site number for which the report is desired:"
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             'and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       USE EQUIP INDEX EQUIPSIT
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No equipment exists for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,15 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF
ENDDO WHILE .T.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(55)
*
*   CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
*   IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
*
@ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
SET COLOR TO  /BR,  /BR
@ 13,49 SAY "Y"
@ 13,56 SAY "N"
STORE "N" TO ACCEPT
@ 13,62 GET ACCEPT PICT "!"
READ
*
```

```
101 *   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
102 *
103 DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
104     IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
105         SET COLOR TO W+/R, W+/R
106         @ 24,24 SAY " Response must be either N or Y "
107         DO DELAY
108         STORE "N" TO ACCEPT
109     ENDIF
110     SET COLOR TO  /BR,  /BR
111     @ 13,62 GET ACCEPT PICT "!"
112     READ
113 ENDDO
114 SET COLOR TO  /BR,  /BR
115 @ 13,15 SAY SPACE(55)
116 *
117 SET COLOR TO W+/BR, W+/BR
118 @ 13,17 SAY " COMPUTING TOTALS FOR EACH SITE FEATURE NUMBER "
119 *
120 USE EQUIP INDEX EFEAT
121 TOTAL ON FEATURENO TO TEMPONE.DBF FIELDS QTY;
122       FOR FEATURENO <> 'XXXXXX' .AND. SITENO = '&MSITE'
123 SELECT 1
124 USE TEMPONE
125 SELECT 2
126 USE DESCRIP INDEX DESCRIP
127 SELECT TEMPONE
128 SET RELATION TO FEATURENO INTO DESCRIP
129 GO TOP
130 *
131 @ 13,15 SAY SPACE(55)
132 *
133 IF ACCEPT = "Y" THEN
134    ?? FLASH + "W.PRINTER/"
135    SET CONSOLE OFF
136    WAIT TO CHOICE
137    SET CONSOLE ON
138    SET COLOR TO W/B, W/B
139    @ 22,10 SAY SPACE(65)
140    STORE DTOC(DATE()) TO TODAY
141    STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
142          SUBSTR(TODAY,7,2) TO TODATE
143    STORE 0 TO PAGENO
144    STORE 61 TO LINECT
145    SET COLOR TO R+/ , R+/
146    SET DEVICE TO PRINT
147 *
148    DO WHILE .NOT. EOF()
149        DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
150            @ LINECT,9  SAY SITENO
```

```
151             @ LINECT,17 SAY DESCRIP->CLIN
152             @ LINECT,27 SAY FEATURENO
153             @ LINECT,39 SAY DESCRIP->DESCIPT
154             @ LINECT,71 SAY QTY
155             LINECT = LINECT + 1
156             SKIP
157         ENDDO WHILE (LINECT <= 60 .AND. .NOT. EOF())
158 *
159         IF EOF() = .T. THEN
160             IF PAGENO > 1 THEN
161                 @ 62,37 SAY "Page " + STR(PAGENO,2,0)
162             ENDIF PAGENO > 1
163             EJECT
164             SET DEVICE TO SCREEN
165             @ 13,25 SAY " FINISHED PRINTING THE REPORT "
166             DO DELAY
167             EXIT
168         ELSE
169             SET DEVICE TO SCREEN
170             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
171             SET DEVICE TO PRINT
172         ENDIF EOF() = .T.
173 *
174         IF (LINECT > 60 .AND. PAGENO > 1) THEN
175             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
176         ENDIF (LINECT > 60 .AND. PAGENO > 1)
177         @ 2,25 SAY " EQUIPMENT SITE LEVEL REPORT "
178         @ 4,60 SAY TODATE
179         @ 6,8  SAY "SITE     CLIN     FEATURE#              DESCRIPTION"
180         @ 6,71 SAY "QTY"
181         @ 7,2  SAY "================================================="
182         @ 7,51 SAY "============================"
183         PAGENO = PAGENO + 1
184         STORE 9 TO LINECT
185 *
186     ENDDO WHILE .NOT. EOF()
187 *
188 ELSE
189     SET COLOR TO GR+/B, GR+/B
190     @ 5,8  SAY "SITE     CLIN     FEATURE#              DESCRIPTION"
191     @ 5,71 SAY "QTY"
192     SET COLOR TO  /BR,  /BR
193     STORE 0 TO LINECT
194 *
195     DO WHILE .NOT. EOF()
196        DO WHILE LINECT < 15
197             @ LINECT+7,9  SAY SITENO
198             @ LINECT+7,17 SAY DESCRIP->CLIN
199             @ LINECT+7,27 SAY FEATURENO
200             @ LINECT+7,39 SAY DESCRIP->DESCIPT
```

```
201             @ LINECT+7,71 SAY QTY
202             LINECT = LINECT + 1
203             SKIP
204             IF EOF() = .T. THEN
205                 SET COLOR TO W+/R, W+/R
206                 @ 24,18 SAY " End of File reached, Press any key to EXIT "
207                 SET CONSOLE OFF
208                 WAIT TO ACCEPT
209                 SET CONSOLE ON
210                 EXIT
211             ENDIF EOF() = .T.
212         ENDDO WHILE LINECT < 15
213 *
214         IF EOF() = .T. THEN
215             EXIT
216         ENDIF EOF() = .T.
217         SET COLOR TO R+/B, R+/B
218         STORE "C" TO CHOICE
219         @ 22,57 GET CHOICE PICT "!"
220         READ
221 *
222 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
223 *
224         DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
225             IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
226                 SET COLOR TO W+/R, W+/R
227                 @ 24,24 SAY " Response must be either C or X "
228                 DO DELAY
229                 STORE "C" TO CHOICE
230             ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
231             SET COLOR TO R+/B, R+/B
232             @ 22,57 GET CHOICE PICT "!"
233             READ
234         ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
235 *
236 *       DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
237 *
238         IF CHOICE = "C"
239             SET COLOR TO  /BR,  /BR
240             @ 07,2 SAY SPACE(76)
241             @ 08,2 SAY SPACE(76)
242             @ 09,2 SAY SPACE(76)
243             @ 10,2 SAY SPACE(76)
244             @ 11,2 SAY SPACE(76)
245             @ 12,2 SAY SPACE(76)
246             @ 13,2 SAY SPACE(76)
247             @ 14,2 SAY SPACE(76)
248             @ 15,2 SAY SPACE(76)
249             @ 16,2 SAY SPACE(76)
250             @ 17,2 SAY SPACE(76)
```

```
251             @ 18,2 SAY SPACE(76)
252             @ 19,2 SAY SPACE(76)
253             @ 20,2 SAY SPACE(76)
254             @ 21,2 SAY SPACE(76)
255             STORE 0 TO LINECT
256         ELSE
257             EXIT
258         ENDIF CHOICE = "C"
259 *
260     ENDDO WHILE .NOT. EOF()
261 *
262 ENDIF ACCEPT = "Y"
263 *
264 *  ERASE THE TEMPORARY DATABASE USED FOR TOTALS
265 *
266 CLOSE DATABASES
267 SET CONSOLE OFF
268 ERASE TEMPONE.DBF
269 SET CONSOLE ON
270 SET PRINT OFF
271 *
272 *  RETURN TO CALLING PROGRAM
273 *
274 RELEASE ACCEPT, CHOICE, ERROR, LINECT, MESSAGE, MSITE, PAGENO,;
275         TODAY, TODATE
276 RETURN
277 ************************************************************************
```

Page 1 EQUIPCMD.PRG Program Listing

```
1  * PROCEDURE EQUIPCMD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER THE OPPORTUNITY TO MODIFY OR REVIEW
9  *                   ALL DATA IN THE EQUIPMENT DATABASE.
10 *
11 * INPUT FILES     : NONE
12 *
13 * OUTPUT FILE     : NONE
14 *
15 * MODULES CALLED : EQUIPUPD.PRG. EQUIPREV.PRG
16 *
17 * CALLED BY       : MAINMENU.CMD
18 *
19 * LOCAL VARIABLES: SELEKT
20 *
21 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
22 *
23 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE
24 * SELECTION.
25 *
26 STORE "1" TO SELEKT
27 DO WHILE SELEKT < "3"
28    SET COLOR TO W/B, W/B
29    CLEAR
30    ?? FLASH + "W.EQUIPCMD/"
31    SET CONSOLE OFF
32    WAIT TO SELEKT
33    SET CONSOLE ON
34 *
35 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
36 *
37    DO CASE
38 *
39 *       CALL THE EQUIPMENT UPDATE PROGRAM.
40        CASE SELEKT = "1"
41            DO EQUIPUPD
42 *
43 *       CALL THE EQUIPMENT REVIEW PROGRAM.
44        CASE SELEKT = "2"
45            DO EQUIPREV
46 *
47 *       RETURN TO THE MAIN MENU PROGRAM.
48        CASE SELEKT = "3"
49 *
50      ENDCASE
```

```
51| *
52| ENDDO  (WHILE SELEKT = "3")
53| *
54| *  RETURN TO THE CALLING PROGRAM
55| *
56| RETURN
57| ************************************************************************
```

```
1  * PROCEDURE EQUIPREV.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, SC, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO REVIEW ALL RECORDS IN THE
9  *                   EQUIPMENT DATABASE.
10 *
11 * INPUT FILES     : EQUIP.DBF INDEX EQUIPSIT.NDX
12 *
13 * OUTPUT FILES    : NONE
14 *
15 * CALLED BY       : EQUIPCMD.PRG
16 *
17 * MODULES CALLED : DELAY.PRG
18 *
19 * GLOBAL VARIABLE: HIDATE, HIFNUM, HISITE, LODATE, LOFNUM, LOSITE
20 *
21 * LOCAL VARIABLES: CURRENTNO, EOF, ERROR, FIRST_REC, LAST_REC, MCLIN,
22 *                  MDESCIPT, MESSAGE, MSITE, MFEAT, TOF
23 *
24 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
25 *
26 * CASE SELECTION = 2     REVIEW EQUIPMENT FILE RECORDS
27 *
28 * USE EQUIPMENT DATABASE INDEXED ON SITE NUMBER AND WAIT FOR THE
29 * USER TO INPUT THE SITE NUMBER, THEN START REVIEWING FROM THAT POINT.
30 *
31 SET ESCAPE OFF
32 SET TALK OFF
33 SELECT 1
34 USE EQUIP
35 GO TOP
36 SET COLOR TO W+/B, W+/B, B
37 CLEAR
38 IF EOF() = .T. THEN
39    SET COLOR TO W+/R, W+/R
40    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
41    DO DELAY
42    RETURN
43 ENDIF
44 ?? FLASH + "S.EQUIPREV.SCR/"
45 @ 24,0 SAY SPACE (80)
46 STORE "Enter 00 to start at TOF, 99 to start at EOF, or a site number " +;
47       "between 01 and 58 " TO MESSAGE
48 SET COLOR TO  /W,  /W
49 @ 24,0 SAY MESSAGE
50 STORE '88' TO MSITE
```

```
DO WHILE .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
   SET COLOR TO  /BR,  /BR
   STORE '00' TO MSITE
   @ 9,20 GET MSITE PICT '99'
   READ
   IF .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE + ' and ' +;
             HISITE + ', Zero (00) or 99  ' TO ERROR
       @ 24,13 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY MESSAGE
       LOOP
   ELSE
       IF (MSITE = '00' .OR. MSITE = '99') THEN
           USE EQUIP
           IF MSITE = '00' THEN
               GO BOTTOM
               STORE RECNO() TO LAST_REC
               GO TOP
               STORE RECNO() TO FIRST_REC
           ELSE
               IF MSITE = '99' THEN
                   GO TOP
                   STORE RECNO() TO FIRST_REC
                   GO BOTTOM
                   STORE RECNO() TO LAST_REC
               ENDIF MSITE = '99'
           ENDIF MSITE = '00'
       ELSE
           USE EQUIP INDEX EQUIPSIT, EQUIPPRJ, EQUIPDAT, EQUIPSD
           GO TOP
           FIND &MSITE
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
               STORE " No records exist for site number " + MSITE +;
                     ", try again " TO ERROR
               SET COLOR TO W+/R, W+/R
               @ 24,16 SAY ERROR
               DO DELAY
               SET COLOR TO  /W,   /W
               @ 24,0 SAY MESSAGE
               STORE '88' TO MSITE
           ENDIF
       ENDIF
   ENDIF
```

```
101 ENDDO WHILE
102 *
103 STORE SPACE(10) + 'Enter "00    " to start at TOF or a six digit ' +;
104       'feature number' + SPACE(10) TO MESSAGE
105 IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
106    SET COLOR TO  /W,  /W
107    @ 24,0 SAY MESSAGE
108    DO WHILE .T.
109        SET COLOR TO  /BR,  /BR
110        STORE '00    ' TO MFEAT
111        @ 14,45 GET MFEAT PICT '999999'
112        READ
113        IF .NOT. ((MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
114                  MFEAT = '00    ' .OR. MFEAT = '99    ')
115            SET COLOR TO W/B, W/B
116            @ 24,0 SAY SPACE(80)
117            SET COLOR TO W+/R, W+/R
118            STORE ' Response must be between ' + LOFNUM + ' and ' +;
119                  HIFNUM + ', Zero (00) or 99  ' TO ERROR
120            @ 24,8 SAY ERROR
121            DO DELAY
122            SET COLOR TO  /W,  /W
123            @ 24,0 SAY MESSAGE
124            LOOP
125        ELSE
126            IF MFEAT = '00    ' THEN
127                EXIT
128            ENDIF
129            IF (MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM)
130                STORE MSITE + MFEAT TO MKEY
131                USE EQUIP INDEX EQUIPDAT
132                GO TOP
133                FIND &MKEY
134                IF EOF() = .T. THEN
135                    SET COLOR TO W/B, W/B
136                    @ 24,0 SAY SPACE(80)
137                    SET COLOR TO W+/R, W+/R
138                    @ 24,12 SAY ' No record exists for feature number ' +;
139                                MFEAT + ', try again '
140                    DO DELAY
141                    SET COLOR TO  /W,  /W
142                    @ 24,0 SAY MESSAGE
143                    LOOP
144                ELSE
145                    EXIT
146                ENDIF EOF() = .T.
147            ENDIF
148        ENDIF (MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM)
149    ENDDO WHILE
150 ENDIF .NOT. (MSITE >= LOSITE .OR. MSITE <= HISITE)
```

```
151 *
152 SET COLOR TO W/B, W/B
153 @ 24,0 SAY SPACE(80)
154 STORE " At beginning of records for site number " +;
155       MSITE + " " TO TOF
156 STORE " At end of records for site number " + MSITE + " " TO EOF
157 DO WHILE .T.
158    SET COLOR TO R+/B, R+/B
159    @ 6,47  SAY RECNO() PICT "999"
160    STORE FEATURENO TO MFEAT
161    SELECT 2
162    USE DESCRIP INDEX DESCRIP
163    FIND &MFEAT
164    STORE CLIN TO MCLIN
165    STORE DESCIPT TO MDESCRIP
166    SELECT 1
167    SET COLOR TO  /BR, /BR
168    @ 9,20  SAY SITENO PICT "99"
169    @ 9,68  SAY EFFDATE PICT "999999"
170    @ 13,45 SAY MCLIN PICT "9999"
171    @ 14,45 SAY FEATURENO PICT "999999"
172    @ 15,45 SAY MDESCRIP PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
173    @ 16,45 SAY QTY PICT "999"
174    @ 18,50 SAY UNIT_PRICE PICT "99999999.99"
175    @ 19,50 SAY MO_MAINT PICT "99999999.99"
176    @ 20,53 SAY UNIT_INSTA PICT "99999.99"
177    SET COLOR TO R+/B, R+/B
178    STORE "N" TO CHOICE
179    @ 22,68 GET CHOICE PICT "!"
180    READ
181 *
182 *  ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
183 *
184    DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
185        IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
186            SET COLOR TO W+/R, W+/R
187            @ 24,23 SAY " Response must be either N, P or X "
188            DO DELAY
189            STORE "N" TO CHOICE
190        ENDIF
191        SET COLOR TO R+/B, R+/B
192        @ 22,68 GET CHOICE PICT "!"
193        READ
194    ENDDO
195 *
196 *  SKIP TO THE NEXT RECORD TO BE REVIEWED
197 *
198    IF CHOICE = "N" THEN
199        IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
200            SKIP
```

```
            IF EOF() = .T. THEN
                SKIP - 1
                SET COLOR TO W+/R, W+/R
                @ 24,21 SAY EOF
                DO DELAY
            ELSE
                IF .NOT. (SITENO = MSITE) THEN
                    SKIP - 1
                    SET COLOR TO W+/R, W+R
                    @ 24,21 SAY EOF
                    DO DELAY
                ENDIF
            ENDIF EOF() = .T.
        ELSE
            IF RECNO() = LAST_REC THEN
                GO TOP
            ELSE
                SKIP
            ENDIF
        ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
    ENDIF CHOICE = "N"
*
*  SKIP TO THE PREVIOUS RECORD
*
    IF CHOICE = "P" THEN
        STORE RECNO() TO CURRENTNO
        IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
            SKIP - 1
            IF BOF() = .T. THEN
                GOTO CURRENTNO
                SET COLOR TO W+/R, W+/R
                @ 24,16 SAY TOF
                DO DELAY
            ELSE
                IF .NOT. (SITENO = MSITE) THEN
                    SKIP
                    SET COLOR TO W+/R, W+/R
                    @ 24,16 SAY TOF
                    DO DELAY
                ENDIF
            ENDIF BOF() = .T.
        ELSE
            IF RECNO() = FIRST_REC THEN
                GO BOTTOM
            ELSE
                SKIP - 1
            ENDIF
        ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
    ENDIF CHOICE = "P"
*
```

```
*  USER HAS DECIDED TO EXIT THE REVIEW
*
   IF CHOICE  = "X"
       EXIT
   ENDIF
ENDDO WHILE .T.
*
* RETURN TO CALLING PROGRAM.
*
RELEASE ALL LIKE M*, CURRENTNO, EOF, ERROR, FIRST_REC, LAST_REC, TOF
CLOSE DATABASES
RETURN
************************************************************
```

Page 1 EQUIPUPD.PRG Program Listing

```
1  * PROCEDURE EQUIPUPD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, SC, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO MODIFY ANY DATA ELEMENT IN
9  *                   THE EQUIPMENT DATABASE.
10 *
11 * INPUT FILES     : EQUIP.DBF, INDICES: EQUIPPRJ.NDX, EQUIPSIT.NDX
12 *                   EQUIPDAT.NDX, EQUIPSD.NDX
13 *
14 * OUTPUT FILES    : EQUIP.DBF, INDICES: EQUIPPRJ.NDX, EQUIPSIT.NDX
15 *                   EQUIPDAT.NDX, EQUIPSD.NDX
16 *
17 * CALLED BY       : EQUIPCMD.PRG
18 *
19 * MODULES CALLED : DELAY.PRG
20 *
21 * GLOBAL VARIABLE: HIDATE, HIFNUM, HISITE, LODATE, LOFNUM, LOSITE
22 *
23 * LOCAL VARIABLES: MEFFDATE, MSITE, MSITE, MFEAT, MPRICE,
24 *                  MMAINT, MINSTALL, MQTY, MESSAGE
25 *                  ACCEPT, CHOICE, CURRENTNO, EOF, ERROR, FIRST_REC,
26 *                  INTRO, LAST_REC, TOF
27 *
28 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
29 *
30 * CASE SELECTION = 1     UPDATE EXISTING RECORDS
31 *
32 * USE EQUIPMENT DATABASE USING THE SITE NUMBER INDEX, BUT UPDATING
33 * ALL EQUIP FILE RELATED INDICES, ASK THE USER TO INPUT A SITE
34 * NUMBER THEN START UPDATING FROM THAT POINT.
35 *
36 SET ESCAPE OFF
37 SET TALK OFF
38 USE EQUIP
39 GO TOP
40 SET COLOR TO W+/B, W+/B, B
41 CLEAR
42 IF EOF() = .T. THEN
43    SET COLOR TO W+/R, W+/R
44    @ 13,24 SAY " The EQUIPMENT Database is EMPTY! "
45    DO DELAY
46    RETURN
47 ENDIF
48 ?? FLASH + "S.EQUIPUPD.SCR/"
49 @ 24,0 SAY SPACE(80)
50 STORE "Enter 00 to start at TOF, 99 to start at EOF, or a site " +;
```

```
51|       "number between " + LOSITE + " and " + HISITE + " " TO MESSAGE
52| SET COLOR TO  /W,  /W
53| @ 24,0 SAY MESSAGE
54| STORE '88' TO MSITE
55| DO WHILE .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
56|    SET COLOR TO  /BR,  /BR
57|    STORE '00' TO MSITE
58|    @ 8,20 GET MSITE PICT '99'
59|    READ
60|    IF .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
61|        SET COLOR TO W/B, W/B
62|        @ 24,0 SAY SPACE(80)
63|        SET COLOR TO W+/R, W+/R
64|        STORE ' Response must be between ' + LOSITE + ' and ' + HISITE +;
65|              ', Zero (00) or 99  ' TO ERROR
66|        @ 24,13 SAY ERROR
67|        DO DELAY
68|        SET COLOR TO  /W,  /W
69|        @ 24,0 SAY MESSAGE
70|        LOOP
71|    ELSE
72|        IF (MSITE = '00' .OR. MSITE = '99') THEN
73|            USE EQUIP
74|            IF MSITE = '00' THEN
75|                GO BOTTOM
76|                STORE RECNO() TO LAST_REC
77|                GO TOP
78|                STORE RECNO() TO FIRST_REC
79|            ELSE
80|                IF MSITE = '99' THEN
81|                    GO TOP
82|                    STORE RECNO() TO FIRST_REC
83|                    GO BOTTOM
84|                    STORE RECNO() TO LAST_REC
85|                ENDIF MSITE = '99'
86|            ENDIF MSITE = '00'
87|        ELSE
88|            USE EQUIP INDEX EQUIPSIT, EQUIPPRJ, EQUIPDAT, EQUIPSD
89|            GO TOP
90|            FIND &MSITE
91|            IF EOF() = .T. THEN
92|                SET COLOR TO W/B, W/B
93|                @ 24,0 SAY SPACE(80)
94|                STORE " No records exist for site number " + MSITE +;
95|                      ", try again " TO ERROR
96|                SET COLOR TO W+/R, W+/R
97|                @ 24,16 SAY ERROR
98|                DO DELAY
99|                SET COLOR TO  /W,   /W
100|               @ 24,0 SAY MESSAGE
```

```
                STORE '88' TO MSITE
            ENDIF
        ENDIF
    ENDIF
ENDDO WHILE .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
*
STORE SPACE(10) + 'Enter "00    " to start at TOF or a six digit ' +;
      'feature number' + SPACE(10) TO MESSAGE
IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
   SET COLOR TO  /W,  /W
   @ 24,0 SAY MESSAGE
   DO WHILE .T.
       SET COLOR TO  /BR,  /BR
       STORE '00    ' TO MFEAT
       @ 11,45 GET MFEAT PICT '999999'
       READ
       IF .NOT. ((MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
                  MFEAT = '00    ' .OR. MFEAT = '99    ')
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' Response must be between ' + LOFNUM + ' and ' +;
                 HIFNUM + ', Zero (00) or 99  ' TO ERROR
           @ 24,8 SAY ERROR
           DO DELAY
           SET COLOR TO  /W,  /W
           @ 24,0 SAY MESSAGE
           LOOP
       ELSE
           IF MFEAT = '00    ' THEN
               EXIT
           ENDIF
           IF (MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM)
               STORE MSITE + MFEAT TO MKEY
               USE EQUIP INDEX EQUIPDAT
               GO TOP
               FIND &MKEY
               IF EOF() = .T. THEN
                   SET COLOR TO W/B, W/B
                   @ 24,0 SAY SPACE(80)
                   SET COLOR TO W+/R, W+/R
                   STORE ' No record exists for feature number ' +;
                           MFEAT + ', try again ' TO ERROR
                   @ 24,12 SAY ERROR
                   DO DELAY
                   SET COLOR TO  /W,  /W
                   @ 24,0 SAY MESSAGE
                   LOOP
               ELSE
                   EXIT
```

```
151                 ENDIF EOF() = .T.
152               ENDIF (MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM)
153           ENDIF
154       ENDDO WHILE .T.
155   ENDIF .NOT. (MSITE >= LOSITE .OR. MSITE <= HISITE)
156   *
157   SET COLOR TO W/B, W/B
158   @ 24,0 SAY SPACE(80)
159   STORE " At beginning of records for site number " +;
160         MSITE + " " TO TOF
161   STORE " At end of records for site number " + MSITE + " " TO EOF
162   STORE SPACE(16) + 'Press "Page Down" key to terminate record update' +;
163         SPACE(16) TO MESSAGE
164   STORE 1 TO INTRO
165   DO WHILE .T.
166      SET COLOR TO  /W,  /W
167      @ 24,0 SAY MESSAGE
168   *
169   *  STORING THE OLD RECORD TO A WORK RECORD AREA.  THE M PREFIX
170   *  INDICATES MEMORY VARIABLES DISTINGUISHING THEM FROM THEIR
171   *  CORRESPONDING DATABASE FIELDS.
172   *
173      STORE UNIT_PRICE  TO MPRICE
174      STORE MO_MAINT    TO MMAINT
175      STORE UNIT_INSTA  TO MINSTALL
176      STORE QTY         TO MQTY
177      STORE FEATURENO TO MFEAT
178      SELECT 2
179      USE DESCRIP INDEX DESCRIP
180      FIND &MFEAT
181      STORE DESCIPT TO MDESCIPT
182      SELECT 1
183   *
184   *  INFORM THE USER OF HOW TO TERMINATE THE UPDATE OF A RECORD
185   *
186      IF INTRO = 1 THEN
187          STORE 0 TO INTRO
188          ?? FLASH + "W.EQUIPUPD/"
189          SET CONSOLE OFF
190          WAIT TO ANS
191          SET CONSOLE ON
192      ENDIF
193   *
194      SET COLOR TO R+/B, R+/B
195      @ 5,47  SAY RECNO() PICT "999"
196      SET COLOR TO  /BR,  /BR
197      @ 8,20  SAY SITENO PICT "99"
198      @ 8,68  SAY EFFDATE PICT "999999"
199      @ 11,45 SAY MFEAT PICT "999999"
200      @ 12,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
```

```
201     @ 13,45 SAY MQTY PICT "999"
202     @ 15,50 GET MPRICE PICT "99999999.99"
203     @ 16,50 GET MMAINT PICT "99999999.99"
204     @ 17,53 GET MINSTALL PICT "99999.99"
205     READ
206     SET COLOR TO W/B, W/B
207     @ 24,0 SAY SPACE(80)
208  *
209     IF .NOT. (QTY=MQTY .AND. UNIT_PRICE=MPRICE .AND.;
210               MO_MAINT=MMAINT .AND. UNIT_INSTA=MINSTALL) THEN
211  *
212  *       ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES.
213  *
214          SET COLOR TO W+/B, W+/B
215          @ 19,12 SAY "Do you want to accept the changes?  (Yes or No):  "
216          SET COLOR TO  R+/B, R+/B
217          @ 19,49 SAY "Y"
218          @ 19,56 SAY "N"
219          STORE "N" TO ACCEPT
220          @ 19,62 GET ACCEPT PICT "!"
221          READ
222  *
223  *       ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
224  *
225          DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
226              IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
227                  SET COLOR TO W/B, W/B
228                  @ 24,0 SAY SPACE(80)
229                  SET COLOR TO W+/R, W+/R
230                  @ 24,24 SAY " Response must be either N or Y "
231                  DO DELAY
232                  STORE "N" TO ACCEPT
233              ENDIF
234              SET COLOR TO R+/B, R+/B
235              @ 19,62 GET ACCEPT PICT "!"
236              READ
237          ENDDO
238          @ 19,62 SAY " "
239  *
240          IF ACCEPT = "Y" THEN
241              REPLACE UNIT_PRICE WITH MPRICE
242              REPLACE MO_MAINT WITH MMAINT
243              REPLACE UNIT_INSTA WITH MINSTALL
244              REPLACE QTY WITH MQTY
245          ENDIF
246      ENDIF
247  *
248      SET COLOR TO W/B, W/B
249      @ 19,10 SAY SPACE(60)
250      SET COLOR TO R+/B, R+/B
```

```
251     STORE "N" TO CHOICE
252     @ 21,68 GET CHOICE PICT "!"
253     READ
254  *
255  *  ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
256  *
257     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
258         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
259             SET COLOR TO W/B, W/B
260             @ 24,0 SAY SPACE(80)
261             SET COLOR TO W+/R, W+/R
262             @ 24,23 SAY " Response must be either N, P or X "
263             DO DELAY
264             STORE "N" TO CHOICE
265         ENDIF
266         SET COLOR TO R+/B, R+/B
267         @ 21,68 GET CHOICE PICT "!"
268         READ
269     ENDDO
270  *
271  *  SKIP TO THE NEXT RECORD TO BE REVIEWED
272  *
273     IF CHOICE = "N" THEN
274         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
275             SKIP
276             IF EOF() = .T. THEN
277                 SKIP - 1
278                 SET COLOR TO W+/R, W+/R
279                 @ 24,21 SAY EOF
280                 DO DELAY
281             ELSE
282                 IF .NOT. (SITENO = MSITE) THEN
283                     SKIP - 1
284                     SET COLOR TO W+/R, W+R
285                     @ 24,21 SAY EOF
286                     DO DELAY
287                 ENDIF
288             ENDIF EOF() = .T.
289         ELSE
290             IF RECNO() = LAST_REC THEN
291                 GO TOP
292             ELSE
293                 SKIP
294             ENDIF
295         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
296     ENDIF CHOICE = "N"
297  *
298  *  SKIP TO THE PREVIOUS RECORD
299  *
300     IF CHOICE = "P" THEN
```

```
301         STORE RECNO() TO CURRENTNO
302         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
303             SKIP - 1
304             IF BOF() = .T. THEN
305                 GOTO CURRENTNO
306                 SET COLOR TO W+/R, W+/R
307                 @ 24,16 SAY TOF
308                 DO DELAY
309             ELSE
310                 IF .NOT. (SITENO = MSITE) THEN
311                     SKIP
312                     SET COLOR TO W+/R, W+/R
313                     @ 24,16 SAY TOF
314                     DO DELAY
315                 ENDIF
316             ENDIF BOF() = .T.
317         ELSE
318             IF RECNO() = FIRST_REC THEN
319                 GO BOTTOM
320             ELSE
321                 SKIP - 1
322             ENDIF
323         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE'58')
324     ENDIF CHOICE = "P"
325 *
326 *  USER HAS DECIDED TO EXIT THE REVIEW
327 *
328     IF CHOICE  = "X"
329         EXIT
330     ENDIF
331 *
332 ENDDO WHILE .T.
333 *
334 * RETURN TO CALLING PROGRAM.
335 *
336 RELEASE ALL LIKE M*, ACCEPT, CHOICE, CURRENTNO, EOF, ERROR,;
337         FIRST_REC, INTRO, LAST_REC, TOF
338 CLOSE DATABASES
339 RETURN
340 ************************************************************************
```

```
1  * PROCEDURE MAINMENU.PRG
2  *
3  * AUTHORS          : LCDR EDWARD J. CASE, SC, USN
4  *                    LCDR WINSTON H. BUCKLEY, SC, USN
5  *                    LCDR ROBERT F. BRADO, USN
6  *                    LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE          : PROVIDE THE USER THE CHOICE OF LOADING A NEW DELIVERY,
9  *                    ORDER, MAINTAINING THE EQUIPMENT, MANUAL, AND
10 *                    SERIAL NUMBER DATA BASES OR GETTING A SERIES OF
11 *                    REPORTS FROM THESE UPDATED DATABASES.
12 *
13 * INPUT FILES      : NONE.
14 *
15 * OUTPUT FILES     : NONE.
16 *
17 * CALLED BY        : SELECTOR.PRG
18 *
19 * MODULES CALLED   : NEWDOCMD.PRG, EQUIPCMD.PRG, MANULCMD.PRG,
20 *                    SERNOCMD.PRG, REPORCMD.PRG, DESPMOD.PRG,
21 *                    CONFMOD.PRG,  DELAY.PRG, MAINTDO.PRG, MKLABELS.PRG
22 *
23 * GLOBAL VARIABLES : HIDATE, HIFNUM, HISITE, LODATE, LOFNUM, LOSITE
24 *
25 * LOCAL VARIABLES  : ANS
26 *
27 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
28 *
29 * DBASE PROGRAM CONFIGURATION VARIABLES:
30 *
31 SET BELL OFF
32 SET CONSOLE ON
33 SET INTENSITY OFF
34 SET SCOREBOARD OFF
35 SET TALK OFF
36 PUBLIC HIDATE, HIFNUM, HISITE, LODATE, LOFNUM, LOSITE
37 *
38 *  INITIALIZE THE PUBLIC VARIABLES
39 *
40 STORE '991231' TO HIDATE
41 STORE '994001' TO HIFNUM
42 STORE '58' TO HISITE
43 STORE '840101' TO LODATE
44 STORE '000101' TO LOFNUM
45 STORE '01' TO LOSITE
46 *
47 *  DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE USER'S CHOICE.
48 *
49 STORE "1" TO ANS
50 DO WHILE .T.
```

```
51      FLASH = CHR(145)
52      SET COLOR TO W/B, W/B, B
53      ?? FLASH + "S.MAINMENU.SCR/"
54      @ 24,0 SAY SPACE (80)
55      SET COLOR TO R+/B, R+/B
56      @ 22,53 GET ANS PICT "9"
57      READ
58  *
59  *   PERFORM APPROPRIATE TASK BASED ON THE USER'S CHOICE.
60  *
61      DO CASE
62  *
63  *       CALL THE NEW DELIVERY ORDER LOAD COMMAND PROGRAM.
64          CASE ANS = "1"
65              DO NEWDOCMD
66              STORE "1" TO ANS
67  *
68  *       CALL THE EQUIPMENT FILE MAINTENANCE COMMAND PROGRAM.
69          CASE ANS = "2"
70              DO EQUIPCMD
71              STORE "2" TO ANS
72  *
73  *       CALL THE DESCRIPTION FILE MAINTENANCE COMMAND PROGRAM.
74          CASE ANS = "3"
75              DO DESPMOD
76              STORE "3" TO ANS
77  *
78  *       CALL THE SITE CONFIGURATION FILE MAINTENANCE COMMAND PROGRAM.
79          CASE ANS = "4"
80              DO CONFMOD
81              STORE "4" TO ANS
82  *
83  *       CALL THE MANUAL FILE MAINTENANCE COMMAND PROGRAM.
84          CASE ANS = "5"
85              DO MANULCMD
86              STORE "5" TO ANS
87  *
88  *       CALL THE SERIAL NUMBER MAINTENANCE COMMAND PROGRAM.
89          CASE ANS = "6"
90              DO SERNOCMD
91              STORE "6" TO ANS
92  *
93  *       CALL THE REPORTS GENERATION COMMAND PROGRAM.
94          CASE ANS = "7"
95              DO REPORCMD
96              STORE "7" TO ANS
97  *
98  *       CALL THE MAINTENANCE DELIVERY ORDER GENERATION PROGRAM
99          CASE ANS = "8"
100             DO MAINTDO
```

```
101             STORE "8" TO ANS
102 *
103 *       CALL THE MAILING LABELS GENERATION PROGRAM
104         CASE ANS = "9"
105             DO MKLABELS
106             STORE "9" TO ANS
107 *
108 *       RETURN THE USER TO SELECTOR PROGRAM CONTROL.
109         CASE ANS = "0"
110             CLOSE DATABASES
111             RETURN
112 *
113         ENDCASE
114 *
115 *  CONTINUE PROCESSING LOOP CONTROL CHECK.
116 *
117 ENDDO WHILE .T.
118 ************************************************************************
```

Page 1 MAINTDO.PRG Program Listing

```
1  * PROCEDURE MAINTDO.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE INPUTS FOR A MAINTENANCE DELIVERY
9  *                   ORDER, WHICH WILL BW IMPORTED INTO LOTUS 1-2-3.
10 *
11 * INPUT FILES     : EQUIP.DBF, DESCRIP.DBF, DECSRIP.NDX, TEMPONE.DBF
12 *                   EFEAT.NDX. TEMOTWO.DBF, TEMPTHRE.DBF, TEMPFOUR.DBF
13 *
14 * OUTPUT FILE     : NEWDO.PRN
15 *
16 * CALLED BY       : MAINMENU.PRG
17 *
18 * MODULES CALLED : DELAY.PRG
19 *
20 * GLOBAL VARIABLE: HISITE, LOSITE
21 *
22 * LOCAL VARIABLES: ERROR, MESSAGE, MSITE, NOFIND, RATES, SITES
23 *
24 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
25 *
26 SET ESCAPE OFF
27 SET TALK OFF
28 SET COLOR TO W+/B, W+/B, B
29 CLEAR
30 ?? FLASH + "S.MAINTDO.SCR/"
31 @ 24,0 SAY SPACE(80)
32 STORE "   Enter the number of the site for which the maintenance is " +;
33       "to be performed    " TO SITES
34 STORE SPACE(20) + " Enter the Discount and Escalation Rates " +;
35       SPACE(20) TO RATES
36 SET COLOR TO  /BR,  /BR
37 @ 20,57 SAY " NEWDO.PRN "
38 *
39 *  OBTAIN THE NUMBER OF THE SITE TO RECEIVE THE MAINTENANCE FROM THE USER
40 *
41 USE EQUIP INDEX EQUIPSIT.NDX
42 *
43 DO WHILE .T.
44    SET COLOR TO  /W,  /W
45    @ 24,0 SAY SITES
46    SET COLOR TO R+/B, R+/B
47    STORE LOSITE TO MSITE
48    @ 04,65 GET MSITE PICT '99'
49    READ
50    IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
```

```
51          SET COLOR TO W/B, W/B
52          @ 24,0 SAY SPACE(80)
53          SET COLOR TO W+/R, W+/R
54          STORE ' Response must be between ' + LOSITE +;
55                ' and ' + HISITE + ' ' TO ERROR
56          @ 24,22 SAY ERROR
57          DO DELAY
58          LOOP
59      ELSE
60          GO TOP
61          FIND &MSITE
62          IF EOF() = .T. THEN
63              SET COLOR TO W/B, W/B
64              @ 24,0 SAY SPACE(80)
65              SET COLOR TO W+/R, W+/R
66              STORE " No records for site number " + MSITE +;
67                    " exist, try again " TO MESSAGE
68              @ 24,16 SAY MESSAGE
69              DO DELAY
70              LOOP
71          ELSE
72              EXIT
73          ENDIF EOF() = .T.
74      ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
75  ENDDO WHILE .T.
76  *
77  *  ENSURE THAT TEMPORARY DATABASES DO NOT EXIST, IF SO ERASE THEM
78  *
79  SET CONSOLE OFF
80  ERASE TEMPONE.DBF
81  ERASE TEMPONE.NDX
82  ERASE TEMPTWO.DBF
83  ERASE TEMPTHRE.DBF
84  ERASE TEMPFOUR.DBF
85  SET CONSOLE ON
86  *
87  *  INFORM THE USER THAT THERE WILL BE A SLIGHT DELAY
88  *
89  SET COLOR TO W+/R, W+/R
90  STORE SPACE(10) + "Creating a temporary database and index.  " +;
91        "PLEASE BE PATIENT " + SPACE(10) TO MESSAGE
92  @ 24,0 SAY MESSAGE
93  COPY TO TEMPONE.DBF WHILE SITENO = "&MSITE"
94  USE TEMPONE
95  INDEX ON FEATURENO TO TEMPONE
96  TOTAL ON FEATURENO TO TEMPTWO.DBF FIELDS QTY WHILE FEATURENO <> 'XXXXXX'
97  *
98  *  OBTAIN THE DISCOUNT AND ESCALATION RATES FROM THE USER
99  *
100 SET COLOR TO  /W,  /W
```

```
101 @ 24,0 SAY RATES
102 STORE "0.000" TO LCNHWRATE
103 STORE "0.000" TO LCNSWRATE
104 STORE "0.000" TO SNETSWRATE
105 STORE "0.000" TO UPLIFT
106 SET COLOR TO  /BR,  /BR
107 @ 14,61 GET LCNHWRATE PICT "9.999"
108 @ 15,61 GET LCNSWRATE PICT "9.999"
109 @ 16,61 GET SNETSWRATE PICT "9.999"
110 @ 17,61 GET UPLIFT PICT "9.999"
111 READ
112 *
113 *  ASK TO USER TO VERIFY THAT HE/SHE WANTS TO CONTINUE
114 *
115 SET COLOR TO W+/B, W+,B
116 @ 24,0 SAY SPACE(80)
117 @ 22,22 SAY "Do you want to Continue or eXit?  "
118 SET COLOR TO R+/B, R+/B
119 @ 22,37 SAY "C"
120 @ 22,50 SAY "X"
121 STORE "C" TO CHOICE
122 @ 22,56 GET CHOICE PICT "!"
123 READ
124 *
125 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "N", "P" OR "X"
126 *
127 DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
128     IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
129         SET COLOR TO W+/R,W+/R
130         @ 24,24 SAY " Response must be either C or X "
131         DO DELAY
132         STORE "C" TO CHOICE
133     ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
134     SET COLOR TO R+/B,R+/B
135     @ 22,56 GET CHOICE PICT "!"
136     READ
137 ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
138 *
139 SET COLOR TO W/B, W/B
140 @ 22,20 SAY SPACE(50)
141 IF CHOICE = "C" THEN
142    STORE 1 + VAL(LCNHWRATE) TO LCNHWRATE
143    STORE 1 + VAL(LCNSWRATE) TO LCNSWRATE
144    STORE 1 + VAL(SNETSWRATE) TO SNETSWRATE
145    STORE 1 + VAL(UPLIFT) TO UPLIFT
146 ELSE
147    SET CONSOLE OFF
148    CLOSE DATABASES
149    ERASE TEMPONE.DBF
150    ERASE TEMPONE.NDX
```

```
151     ERASE TEMPTWO.DBF
152     ERASE TEMPTHRE.DBF
153     ERASE TEMPFOUR.DBF
154     SET CONSOLE ON
155     SET COLOR TO W/B, W/B
156     @ 24,0 SAY SPACE(80)
157     RELEASE ERROR, MESSAGE, MSITE, NOFIND, RATES, SITES
158     RETURN
159  ENDIF
160  *
161  *   INFORM THE USER THAT THERE WILL BE A SLIGHT DELAY
162  *
163  SET COLOR TO W+/R, W+/R
164  STORE " Creating the MAINTENANCE DELIVERY ORDER may take up to 10 " +;
165        "minutes.  PLEASE WAIT    " TO MESSAGE
166  @ 24,0 SAY MESSAGE
167  SELECT 1
168  USE TEMPTWO
169  SELECT 2
170  USE DESCRIP
171  SELECT TEMPTWO
172  JOIN WITH DESCRIP TO TEMPTHREE FOR FEATURENO = DESCRIP->FEATURENO
173  SELECT 3
174  USE TEMPTHRE
175  GO TOP
176  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNHWRATE FOR FEATURENO > "320100" .AND.;
177         FEATURENO < "420400"
178  GO TOP
179  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "550801"
180  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "550901"
181  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "551001"
182  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "551101"
183  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "551201"
184  REPLACE ALL MO_MAINT WITH BASEMAINT*LCNSWRATE FOR FEATURENO = "551301"
185  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "550710"
186  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "550711"
187  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "550803"
188  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "550903"
189  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551003"
190  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551103"
191  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551203"
192  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551303"
193  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551304"
194  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551403"
195  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551500"
196  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551501"
197  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551502"
198  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551503"
199  REPLACE ALL MO_MAINT WITH BASEMAINT*SNETSWRATE FOR FEATURENO = "551504"
200  SELECT 4
```

```
201 | USE TED
202 | COPY STRUCTURE TO TEMPFOUR
203 | CLOSE DATABASES
204 | USE TEMPFOUR
205 | APPEND FROM TEMPTHRE
206 | GO TOP
207 | REPLACE ALL MAINT_MOS WITH 12
208 | REPLACE ALL MAINT_FAC WITH UPLIFT
209 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "550801"
210 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "550901"
211 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "551001"
212 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "551101"
213 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "551201"
214 | REPLACE ALL MAINT_FAC WITH 1 FOR FEATURENO = "551301"
215 | REPLACE ALL TOT_MAINT WITH MAINT_FAC*MO_MAINT*MAINT_MOS
216 | REPLACE ALL COMP_DT_CR WITH (((UNIT_PRICE + UNIT_INSTA)/48) +;
217 |                              (MO_MAINT * MAINT_FAC)) * .005
218 | REPLACE ALL SYS_DT_CR WITH (QTY*MO_MAINT*MAINT_FAC)
219 | REPLACE ALL TOT_MAINT WITH TOT_MAINT*QTY FOR FEATURENO > "010200" .AND.;
220 |         FEATURENO < "510101"
221 | REPLACE ALL UNIT_PRICE WITH 0
222 | REPLACE ALL TOT_PRICE WITH 0
223 | REPLACE ALL UNIT_INSTA WITH 0
224 | REPLACE ALL TOT_INSTAL WITH 0
225 | COPY TO NEWDO.PRN DELIMITED
226 | *
227 | *  ERASE ALL TEMPORARY DATABASES AND INDICES CREATED DURING THE PROGRAM
228 | *
229 | SET CONSOLE OFF
230 | CLOSE DATABASES
231 | ERASE TEMPONE.DBF
232 | ERASE TEMPTWO.DBF
233 | ERASE TEMPTHRE.DBF
234 | ERASE TEMPFOUR.DBF
235 | ERASE TEMPONE.NDX
236 | SET CONSOLE ON
237 | *
238 | *  RETURN TO CALLING PROGRAM
239 | *
240 | SET COLOR TO W/B, W/B
241 | @ 24,0 SAY SPACE(80)
242 | RELEASE ERROR, MESSAGE, MSITE, NOFIND, RATES, SITES
243 | RETURN
244 | ************************************************************************
```

```
1  * PROCEDURE MANULADD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : ADD NEW MANUALS TO THE MANUAL DATABASE FILE.
9  *
10 * INPUT FILES     : MANUAL.DBF, MANULSIT.NDX
11 *
12 * CALLED BY       : MANULCMD.PRG
13 *
14 * MODULES CALLED : DELAY.PRG
15 *
16 * GLOBAL VARIABLE: HIFNUM, HISITE, LOFNUM, LOSITE
17 *
18 * LOCAL VARIABLES: ACCEPT, CHOICE, ERROR, FEATURES, GETOUT,
19 *                  MCLIN, MANDESCRPT, MDESCIPT, MESSAGE, MFEAT,
20 *                  MSITE, NOFIND, NOSITE, SITES
21 *
22 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
23 *
24 * CASE SELECTION = 1     ADD A NEW MANUAL DESCRIPTION
25 *
26 SET ESCAPE OFF
27 SET TALK OFF
28 USE MANUAL
29 GO TOP
30 SET COLOR TO W+/B, W+/B, B
31 CLEAR
32 IF EOF() = .T. THEN
33    SET COLOR TO W+/R, W+/R
34    @ 13,25 SAY " The MANUALS Database is EMPTY! "
35    DO DELAY
36    RETURN
37 ENDIF
38 SELECT 1
39 USE MANUAL INDEX MANULSIT
40 *
41 ?? FLASH + "S.MANUALS.SCR/"
42 @ 24,0 SAY SPACE(80)
43 @ 22,10 SAY SPACE(60)
44 SET COLOR TO GR+/B, GR+/B
45 @ 6,28 SAY "   Last "
46 SET COLOR TO R+/ , R+/
47 @ 3,26 SAY " MANUAL ADDITION FORMAT "
48 SET COLOR TO W+/B, W+/B
49 @ 22,23 SAY "Enter C to continue or X to exit:  "
50 SET COLOR TO R+/B, R+/B
```

```
@ 22,29 SAY "C"
@ 22,46 SAY "X"
*
*  GENERATE STATUS MESSAGES
*
STORE '   Enter a Site Number between ' + LOSITE + ' and ' +;
      HISITE + ' for the Manual Description Addition    ' TO SITES
STORE ' Enter a Feature Number ( ' + LOFNUM + ' - ' + HIFNUM + ' ) ' +;
      'for the Manual Description Addition ' TO FEATURES
STORE SPACE(20) + 'Enter the Manual Description to be Added' +;
      SPACE(20) TO MANDESCRPT
*
DO WHILE .T.
   SET COLOR TO R+/B, R+/B
   @ 6,47 SAY RECNO() PICT "9999"
*
*  CLEAR SCREEN AND SET INITIAL VALUES FOR VARIABLES TO BE
*  ADDED TO THE FILE. THE M PREFIX INDICATES MEMORY VARIABLES
*  DISTINGUISHING THEM FROM THEIR CORRESPONDING DATABASE FIELDS.
*
   STORE '       'TO MFEAT
   STORE '                          ' TO MMANDESC
*
   SET COLOR TO  /W,  /W
   @ 24,0 SAY SITES
*
*  ENSURE THAT THE SITE NUMBER IS A VALID SITE
*
   DO WHILE .T.
       SET COLOR TO  /BR,  /BR
       STORE LOSITE TO MSITE
       @ 9,45 GET MSITE PICT '99'
       READ
       IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' Response must be between ' + LOSITE + ' and ' +;
                 HISITE + ' ' TO ERROR
           @ 24,22 SAY ERROR
           DO DELAY
           SET COLOR TO  /W,  /W
           @ 24,0 SAY SITES
           LOOP
       ELSE
           GO TOP
           FIND &MSITE
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
```

```
101                 SET COLOR TO W+/R, W+/R
102                 STORE " No records exist for site " + MSITE +;
103                 ", try another site " to NOSITE
104                 @ 24,16 SAY NOSITE
105                 DO DELAY
106                 SET COLOR TO  /W,  /W
107                 @ 24,0 SAY SITES
108                 STORE "99" TO MSITE
109                 LOOP
110             ELSE
111                 EXIT
112             ENDIF EOF() = .T.
113         ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
114     ENDDO WHILE .T.
115 *
116     GO BOTTOM
117     SET COLOR TO  /W,  / W
118     @ 24,0 SAY FEATURES
119     SET COLOR TO  /BR,  /BR
120     STORE 0 TO NOFIND
121     STORE "N" TO GETOUT
122 *
123 *   ENSURE THAT THE FEATURE IS A VALID FEATURE
124 *
125     DO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
126 *
127 *       IF THE USER HAS MADE THREE ATTEMPTS TO SPECIFY A VALID  .PRN FILE
128 *       NAME AND HAS NOT BEEN SUCCESSFUL, ASK HIM/HER IF THEY DESIRE TO
129 *       EXIT THIS PROCESS.
130 *
131         IF NOFIND = 3 THEN
132             SET COLOR TO W+/B, W+/B
133             @ 19,15 SAY " Do you want to exit this process? (Yes or No): "
134             SET COLOR TO  R+/B, R+/B
135             @ 19,51 SAY "Y"
136             @ 19,58 SAY "N"
137             STORE "Y" TO GETOUT
138             @ 19,63 GET GETOUT PICT "!"
139             READ
140 *
141             DO WHILE .NOT. (GETOUT = "N" .OR. GETOUT = "Y")
142                 IF .NOT. (GETOUT = "N" .OR. GETOUT = "Y") THEN
143                     SET COLOR TO W+/R, W+/R
144                     @ 24,24 SAY " Response must be either N or Y "
145                     DO DELAY
146                     STORE "Y" TO GETOUT
147                 ENDIF
148                 SET COLOR TO R+/B, R+/B
149                 @ 19,63 GET GETOUT PICT "!"
150                 READ
```

```
151             ENDDO
152 *
153             SET COLOR TO W/B, W/B
154             @ 19,10 SAY SPACE(65)
155             IF GETOUT = "Y" THEN
156                 EXIT
157             ELSE
158                 STORE 0 TO NOFIND
159                 SET COLOR TO  /W,  / W
160                 @ 24,0 SAY FEATURES
161                 LOOP
162             ENDIF
163         ENDIF
164         IF GETOUT = "Y" THEN
165             EXIT
166         ENDIF
167         SET COLOR TO  /BR,  /BR
168         STORE LOFNUM TO MFEAT
169         @ 12,45 GET MFEAT PICT '999999'
170         READ
171 *
172 *       ENSURE THAT THE FEATURE NUMBER ENTERED BY THE USER IS VALID
173 *
174         IF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) THEN
175             SET COLOR TO W/B, W/B
176             @ 24,0 SAY SPACE(80)
177             SET COLOR TO W+/R, W+/R
178             STORE ' Response must be between ' + LOFNUM +;
179                   ' and ' + HIFNUM + ' ' TO ERROR
180             @ 24,18 SAY ERROR
181             DO DELAY
182             SET COLOR TO  /W,  /W
183             @ 24,0 SAY FEATURES
184         ELSE
185             SELECT 2
186             USE EQUIP INDEX EFEAT
187             GO TOP
188             FIND &MFEAT
189             IF EOF() = .T. THEN
190                 NOFIND = NOFIND + 1
191                 SET COLOR TO W/B, W/B
192                 @ 24,0 SAY SPACE(80)
193                 SET COLOR TO W+/R, W+/R
194                 STORE " Feature Number " + MFEAT +;
195                       " does not exist, try again " TO MESSAGE
196                 IF NOFIND < 3 THEN
197                     @ 24,16 SAY MESSAGE
198                     DO DELAY
199                     SET COLOR TO  /W,  /W
200                     @ 24,0 SAY FEATURES
```

```
201                 ENDIF
202                 STORE "999999" TO MFEAT
203                 SELECT 1
204             ENDIF EOF() = .T.
205         ENDIF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
206     ENDDO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
207 *
208     SET COLOR TO W+/B, W+/B
209     @ 24,0 SAY SPACE(80)
210     IF GETOUT = "Y" THEN
211         EXIT
212     ENDIF
213     SELECT 3
214     USE DESCRIP INDEX DESCRIP
215     GO TOP
216     FIND &MFEAT
217     STORE CLIN TO MCLIN
218     STORE DESCIPT TO MDESCIPT
219     SELECT 1
220     SET COLOR TO  /BR,  /BR
221     @ 13,45 SAY MCLIN PICT "9999"
222     @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
223 *
224     SET COLOR TO  /W,  /W
225     @ 24,0 SAY MANDESCRPT
226     SET COLOR TO  /BR,  /BR
227     @ 17,45 GET MMANDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!"
228     READ
229     SET COLOR TO W/B, W/B
230     @ 24,0 SAY SPACE(80)
231 *
232     IF .NOT. (MANLDESC = MMANDESC) THEN
233 *
234 *       ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES
235 *
236         SET COLOR TO W+/B, W+/B
237         @ 20,12 SAY "Do you want to accept the change?  (Yes or No):"
238         SET COLOR TO R+/B, R+/B
239         @ 20,49 SAY "Y"
240         @ 20,56 SAY "N"
241         STORE "N" TO ACCEPT
242         @ 20,62 GET ACCEPT PICT "!"
243         READ
244 *
245 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
246 *
247         DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
248             IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
249                 SET COLOR TO W+/R, W+/R
250                 @ 24,24 SAY " Response must be either N or Y "
```

```
251                 DO DELAY
252                 STORE "N" TO ACCEPT
253             ENDIF
254             SET COLOR TO R+/B, R+/B
255             @ 20,62 GET ACCEPT PICT "!"
256             READ
257         ENDDO
258         SET COLOR TO W/B, W/B
259         @ 20,10 SAY SPACE(55)
260 *
261 *       IF ENTRIES ARE CORRECT, ADD THEM TO DATABASE.
262 *
263         IF ACCEPT =  "Y"
264             APPEND BLANK
265             REPLACE SITENO     WITH MSITE
266             REPLACE FEATURENO  WITH MFEAT
267             REPLACE MANLDESC   WITH MMANDESC
268         ENDIF
269 *
270     ENDIF
271 *
272     SET COLOR TO R+/B, R+/B
273     STORE "C" TO CHOICE
274     @ 22,58 GET CHOICE PICT "!"
275     READ
276 *
277 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
278 *
279         DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
280             IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
281                 SET COLOR TO W+/R, W+/R
282                 @ 24,24 SAY " Response must be either C or X "
283                 DO DELAY
284                 STORE "C" TO CHOICE
285             ENDIF
286             SET COLOR TO R+/B, R+/B
287             @ 22,58 GET CHOICE PICT "!"
288             READ
289         ENDDO
290 *
291 *   SKIP TO THE NEXT RECORD TO BE REVIEWED
292 *
293     IF CHOICE = "C" THEN
294         STORE "     " TO MCLIN
295         STORE SPACE(30) TO MDESCIPT
296         STORE SPACE(26) TO MMANDESC
297         SET COLOR TO  /BR,  /BR
298         @ 12,45 SAY "       "
299         @ 13,45 SAY MCLIN PICT "9999"
300         @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
```

```
301         @ 17,45 SAY MMANDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!"
302         SKIP
303      ENDIF
304   *
305   *  USER HAS DECIDED TO EXIT THE REVIEW
306   *
307      IF CHOICE  = "X"
308         EXIT
309      ENDIF
310   *
311   ENDDO WHILE .T.
312   *
313   * RETURN TO CALLING PROGRAM.
314   *
315   RELEASE ALL LIKE M*, ACCEPT, CHOICE, ERROR, FEATURES, GETOUT,;
316           NOFIND, NOSITE, SITES
317   CLOSE DATABASES
318   RETURN
319   ************************************************************************
```

Page 1 MANULCMD.PRG Program Listing

```
1  * PROCDURE MANULCMD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER THE OPPORTUNITY TO ADD A MANUAL
9  *                   RECORD, UPDATE AN EXISTING RECORD, DELETE AN EXISTING
10 *                   RECORD OR REVIEW CURRENT RECORDS.
11 *
12 * INPUT FILES     : NONE.
13 *
14 * OUTPUT FILES    : NONE.
15 *
16 * CALLED BY       : MAINMENU.PRG
17 *
18 * MODULES CALLED : MANULADD.PRG, MANULUPD.PRG, MANULDEL.PRG,
19 *                   MANULREV.PRG
20 *
21 * LOCAL VARIABLES: SELEKT
22 *
23 * DATE LAST TIME MODIFIED ============> 23 DECEMBER 1985 <==========
24 *
25 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE SELECTION.
26 *
27 STORE "1" TO SELEKT
28 DO WHILE SELEKT < "5"
29    SET COLOR TO W/B, W/B, B
30    CLEAR
31    ?? FLASH + "W.MANULCMD/"
32    SET CONSOLE OFF
33    WAIT TO SELEKT
34    SET CONSOLE ON
35 *
36 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
37 *
38    DO CASE
39 *
40 *       CALL THE MANUAL ADD PROGRAM.
41        CASE SELEKT = "1"
42            DO MANULADD
43 *
44 *       CALL THE MANUAL UPDATE PROGRAM.
45        CASE SELEKT = "2"
46            DO MANULUPD
47 *
48 *       CALL MANUAL DELETION PROGRAM.
49        CASE SELEKT = "3"
50            DO MANULDEL
```

```
51 *
52 *       CALL MANUAL REVIEW PROGRAM.
53         CASE SELEKT = "4"
54             DO MANULREV
55 *
56 *       RETURN TO THE MAIN MENU PROGRAM.
57         CASE SELEKT = "5"
58 *
59     ENDCASE
60 *
61 ENDDO  (WHILE SELEKT < "5")
62 *
63 *  RETURN TO THE CALLING PROGRAM
64 *
65 RETURN
66 ************************************************************************
```

Page 1 MANULDEL.PRG Program Listing

```
1  * PROCEDURE MANULDEL.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : DELETE MANUAL RECORDS FROM THE MANUAL DATABASE FILE.
9  *
10 * INPUT FILES     : MANUAL.DBF, MANULSIT.NDX
11 *
12 * CALLED BY       : MANULCMD.PRG
13 *
14 * MODULES CALLED : DELAY.PRG
15 *
16 * GLOBAL VARIABLE: HIFNUM, HISITE, LOFNUM, LOSITE
17 *
18 * LOCAL VARIABLES: ACCEPT, CHOICE, ERROR, FEATURES, FIRST_REC,
19 *                  LAST_REC, MCLIN, MDESCIPT, MESSAGE, MFEAT,
20 *                  MKEY, MMANDESC, MSITE, PACKEM, SITES
21 *
22 * DATE LAST TIME MODIFIED ==========> 24 DECEMBER 1985 <==========
23 *
24 * CASE SELECTION = 3     DELETE AN EXISTING MANUAL RECORD
25 *
26 SET DELETED ON
27 SET ESCAPE OFF
28 SET TALK OFF
29 USE MANUAL
30 GO TOP
31 SET COLOR TO W+/B, W+/B, B
32 CLEAR
33 IF EOF() = .T. THEN
34    SET COLOR TO W+/R, W+/R
35    @ 13,25 SAY " The MANUALS Database is EMPTY! "
36    DO DELAY
37    RETURN
38 ENDIF
39 SELECT 1
40 USE MANUAL INDEX MANULSIT
41 GO BOTTOM
42 STORE RECNO() TO LAST_REC
43 *
44 ?? FLASH + "S.MANUALS.SCR/"
45 @ 24,0  SAY SPACE(80)
46 @ 22,10 SAY SPACE(60)
47 SET COLOR TO R+/ , R+/
48 @ 3,26 SAY " MANUAL DELETION FORMAT "
49 SET COLOR TO W+/B, W+/B
50 @ 22,23 SAY "Enter C to continue or X to exit:"
```

```
SET COLOR TO R+/B, R+/B
@ 22,29 SAY "C"
@ 22,46 SAY "X"
STORE SPACE(9) + "Enter the Site Number for the Manual " +;
      "Description to be Deleted" + SPACE(9) TO SITES
STORE SPACE(10) + "Enter the Feature Number for the Manual " +;
      "Description Deletion" + SPACE(10) TO FEATURES
STORE "Records marked for deletion have been deleted and " +;
      "CAN NOT be recovered" TO PACKEM
STORE "Are you sure you want to delete this description?  " +;
      "(Yes or No):" TO MESSAGE
*
SET COLOR TO  /W,  /W
@ 24,0 SAY SITES
*
*  ENSURE THAT THE SITE NUMBER IS A VALID SITE
*
STORE '   ' TO MSITE
DO WHILE .NOT. (MSITE >=  LOSITE .AND. MSITE <= HISITE)
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 9,45 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY SITES
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' No record for site number ' + MSITE +;
                 ' exists, try again ' TO ERROR
           @ 24,16 SAY ERROR
           DO DELAY
           SET COLOR TO  /W,  /W
           @ 24,0 SAY SITES
           STORE '99' TO MSITE
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
```

```
ENDDO WHILE .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
*
SET COLOR TO W/B, W/B
@ 24,0 SAY SPACE(80)
STORE "       " TO MFEAT
SET COLOR TO  /W,  /W
@ 24,0 SAY FEATURES
*
*  ENSURE THAT THE FEATURE IS A VALID FEATURE
*
DO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
   SET COLOR TO  /BR,  /BR
   STORE LOFNUM TO MFEAT
   @ 12,45 GET MFEAT PICT '999999'
   READ
   IF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOFNUM +;
             ' and ' + HIFNUM + ' ' TO ERROR
       @ 24,18 SAY ERROR
       DO DELAY
       SET COLOR TO  /W,  /W
       @ 24,0 SAY FEATURES
       LOOP
   ELSE
       STORE MSITE + MFEAT TO MKEY
       GO TOP
       FIND &MKEY
       IF EOF() = .T. THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' No record exists for feature number ' + MFEAT +;
                 ', try again ' TO ERROR
           @ 24,12 SAY ERROR
           DO DELAY
           SET COLOR TO  /W,  /W
           @ 24,0 SAY FEATURES
           STORE '999999' TO MFEAT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
ENDDO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
*
SET COLOR TO W/B, W/B
@ 24,0 SAY SPACE(80)
*
DO WHILE .T.
   SET COLOR TO R+/B, R+/B
```

```
151     @ 6,47 SAY RECNO() PICT "9999"
152     STORE FEATURENO TO MFEAT
153     SELECT 2
154     USE DESCRIP INDEX DESCRIP.NDX
155     FIND &MFEAT
156     STORE CLIN TO MCLIN
157     STORE DESCIPT TO MDESCIPT
158     SELECT 1
159     SET COLOR TO  /BR,  /BR
160     @ 9,45  SAY SITENO PICT '99'
161     @ 12,45 SAY FEATURENO PICT '999999'
162     @ 13,45 SAY MCLIN PICT "9999"
163     @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
164     @ 17,45 SAY MANLDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!"
165     SET COLOR TO W/B, W/B
166     @ 24,0 SAY SPACE(80)
167  *
168  *       ASK THE USER IF HE/SHE IS SURE ABOUT THE DELETION
169  *
170         SET COLOR TO W+/B, W+/B
171         @ 20,06 SAY MESSAGE
172         SET COLOR TO R+/B, R+/B
173         @ 20,58 SAY "Y"
174         @ 20,65 SAY "N"
175         STORE "N" TO ACCEPT
176         @ 20,70 GET ACCEPT PICT "!"
177         READ
178  *
179  *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
180  *
181         DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
182             IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
183                 SET COLOR TO W+/R, W+/R
184                 @ 24,24 SAY " Response must be either N or Y "
185                 DO DELAY
186                 STORE "N" TO ACCEPT
187             ENDIF
188             SET COLOR TO R+/B, R+/B
189             @ 20,70 GET ACCEPT PICT "!"
190             READ
191         ENDDO
192         SET COLOR TO W/B, W/B
193         @ 20,05 SAY SPACE(70)
194  *
195  *   IF ENTRIES ARE CORRECT, DELETE THEM FROM THE DATABASE,
196  *   IF NOT RECOVER THEM
197  *
198     IF ACCEPT =  "Y"
199         DELETE
200     ENDIF
```

```
*
   SET COLOR TO R+/B, R+/B
   STORE "C" TO CHOICE
   @ 22,58 GET CHOICE PICT "!"
   READ
*
*      ENSURE THAT THE USER'S RESPONSE IS EITHER "C" OR "X"
*
       DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
           IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
               SET COLOR TO W+/R, W+/R
               @ 24,24 SAY " Response must be either C or X "
               DO DELAY
               STORE "C" TO CHOICE
           ENDIF
           SET COLOR TO R+/B, R+/B
           @ 22,58 GET CHOICE PICT "!"
           READ
       ENDDO
*
*  SKIP TO THE NEXT RECORD TO BE REVIEWED
*
   IF CHOICE = "C" THEN
       IF RECNO() = LAST_REC THEN
           GO TOP
       ELSE
           SKIP
       ENDIF
   ENDIF
*
*  USER HAS DECIDED TO EXIT THE REVIEW
*
   IF CHOICE  = "X"
       SET COLOR TO W+/R, W+/R
       @ 24,0
       @ 24,6 SAY PACKEM
       SET COLOR TO W/B, W/B
       PACK
       EXIT
   ENDIF
*
ENDDO WHILE .T.
*
* RETURN TO CALLING PROGRAM.
*
RELEASE ALL LIKE M*, ACCEPT, CHOICE, ERROR, FEATURES, FIRST_REC,;
        LAST_REC, PACKEM, SITES
CLOSE DATABASES
RETURN
*************************************************************************
```

```
1  * PROCEDURE MANULREV.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO REVIEW ALL THE RECORDS IN
9  *                   THE MANUAL DATABASE
10 *
11 * INPUT FILES     : MANUAL.DBF, MANULSIT.NDX
12 *
13 * CALLED BY       : MANULCMD.PRG
14 *
15 * MODULES CALLED : DELAY.PRG
16 *
17 * GLOBAL VARIABLE: HIFNUM, HISITE, LOFNUM, LOSITE
18 *
19 * LOCAL VARIABLES: ACCEPT, CHOICE, CURRENTNO, EOF, ERROR, FIRST_REC,
20 *                  LAST_REC, MCLIN, MDESCIPT, MFEAT, MSITE, TOF
21 *
22 * DATE LAST TIME MODIFIED ==========> 26 DECEMBER 1985 <==========
23 *
24 * CASE SELECTION = 4     REVIEW EXISTING MANUAL RECORDS
25 *
26 SET ESCAPE OFF
27 SET TALK OFF
28 USE MANUAL
29 GO TOP
30 SET COLOR TO W+/B, W+/B, B
31 CLEAR
32 IF EOF() = .T. THEN
33    SET COLOR TO W+/R, W+/R
34    @ 13,25 SAY " The MANUALS Database is EMPTY! "
35    DO DELAY
36    RETURN
37 ENDIF
38 ?? FLASH + "S.MANUALS.SCR/"
39 @ 24,0 SAY SPACE(80)
40 SET COLOR TO R+/ , R+/
41 @ 3,26 SAY " MANUAL REVIEW FORMAT "
42 SELECT 1
43 STORE " Enter 00 to start at TOF, 99 to start at EOF or a site number " +;
44       "between " + LOSITE + " and " + HISITE + " " TO MESSAGE
45 SET COLOR TO  /W,  /W
46 @ 24,0 SAY MESSAGE
47 STORE '88' TO MSITE
48 DO WHILE .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
49    SET COLOR TO  /BR , /BR
50    STORE '00' TO MSITE
```

```
51|     @ 09,45 GET MSITE PICT '99'
52|     READ
53|     IF .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99') THEN
54|         SET COLOR TO W/B, W/B
55|         @ 24,0 SAY SPACE(80)
56|         SET COLOR TO W+/R, W+/R
57|         STORE ' Response must be between ' + LOSITE + ' and ' +;
58|               HISITE + ', Zero (00) or 99  ' TO ERROR
59|         @ 24,13 SAY ERROR
60|         DO DELAY
61|         SET COLOR TO  /W,  /W
62|         @ 24,0 SAY MESSAGE
63|         LOOP
64|     ELSE
65|         IF (MSITE = '00' .OR. MSITE = '99') THEN
66|             USE MANUAL
67|             IF MSITE = '00' THEN
68|                 GO BOTTOM
69|                 STORE RECNO() TO LAST_REC
70|                 GO TOP
71|                 STORE RECNO() TO FIRST_REC
72|             ELSE
73|                 GO TOP
74|                 STORE RECNO() TO FIRST_REC
75|                 GO BOTTOM
76|                 STORE RECNO() TO LAST_REC
77|             ENDIF MSITE = '00'
78|             EXIT
79|         ELSE
80|             USE MANUAL INDEX MANULSIT
81|             GO TOP
82|             FIND &MSITE
83|             IF EOF() = .T. THEN
84|                 SET COLOR TO W/B, W/B
85|                 @ 24,0 SAY SPACE(80)
86|                 SET COLOR TO W+/R, W+/R
87|                 STORE " No records exist for site number " + MSITE +;
88|                       ", try again " TO ERROR
89|                 @ 24,16 SAY ERROR
90|                 DO DELAY
91|                 SET COLOR TO  /W,  /W
92|                 @ 24,0 SAY MESSAGE
93|                 STORE '88' TO MSITE
94|                 LOOP
95|             ELSE
96|                 EXIT
97|             ENDIF
98|         ENDIF
99|     ENDIF
100| ENDDO WHILE
```

```
101 *
102 STORE SPACE(10) + 'Enter "00    " to start at TOF or a six digit ' +;
103       'feature number' + SPACE(10) TO MESSAGE
104 IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
105    SET COLOR TO  /W,  /W
106    @ 24,0 SAY MESSAGE
107    DO WHILE .T.
108        SET COLOR TO  /BR,  /BR
109        STORE '00    ' TO MFEAT
110        @ 12,45 GET MFEAT PICT '999999'
111        READ
112        IF .NOT. ((MFEAT >=  LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
113            MFEAT = '00    ') THEN
114            SET COLOR TO W/B, W/B
115            @ 24,0 SAY SPACE(80)
116            SET COLOR TO W+/R, W+/R
117            STORE ' Response must be between ' + LOFNUM + ' and ' +;
118                  HIFNUM + ' or Zero (00) ' TO ERROR
119            @ 24,9 SAY ERROR
120            DO DELAY
121            SET COLOR TO  /W,  /W
122            @ 24,0 SAY MESSAGE
123            LOOP
124        ELSE
125            IF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) THEN
126                IF MFEAT = '99    ' THEN
127                    SET COLOR TO W/B, W/B
128                    @ 24,0 SAY SPACE(80)
129                    SET COLOR TO W+/R, W+/R
130                    STORE ' Response must be between ' + LOFNUM +;
131                          ' and ' + HIFNUM + ' or Zero (00) ' TO ERROR
132                    @ 24,9 SAY ERROR
133                    DO DELAY
134                    SET COLOR TO  /W,  /W
135                    @ 24,0 SAY MESSAGE
136                    LOOP
137                ENDIF MFEAT = '99    '
138                STORE MSITE + MFEAT TO MKEY
139                USE MANUAL INDEX MANULSIT
140                GO TOP
141                FIND &MKEY
142                IF EOF() = .T. THEN
143                    SET COLOR TO W/B, W/B
144                    @ 24,0 SAY SPACE(80)
145                    SET COLOR TO W+/R, W+/R
146                    STORE " No record with feature number " + MFEAT +;
147                          " exists, try again " TO ERROR
148                    @ 24,12 SAY ERROR
149                    DO DELAY
150                    SET COLOR TO  /W,  /W
```

```
                    @ 24,0 SAY MESSAGE
                    LOOP
                ELSE
                    EXIT
                ENDIF EOF() = .T.
            ELSE
                GO TOP
                EXIT
            ENDIF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
        ENDIF
    ENDDO WHILE .T.
ENDIF .NOT. (MSITE >= LOSITE .OR. MSITE <= HISITE)
*
SET COLOR TO W/B, W/B
@ 24,0 SAY SPACE(80)
STORE " At beginning of records for site number " +;
      MSITE + " " TO TOF
STORE " At end of records for site number " + MSITE + " " TO EOF
DO WHILE .T.
   SET COLOR TO R+/B, R+/B
   @ 6,47 SAY RECNO() PICT "9999"
*
*  CLEAR SCREEN AND SET INITIAL VALUES FOR VARIABLES TO BE
*  ADDED TO THE FILE. THE M PREFIX INDICATES MEMORY VARIABLES
*  DISTINGUISHING THEM FROM THEIR CORRESPONDING DATABASE FIELDS.
*
*
   STORE FEATURENO TO MFEAT
   SELECT 2
   USE DESCRIP INDEX DESCRIP
   FIND &MFEAT
   STORE CLIN TO MCLIN
   STORE DESCIPT TO MDESCIPT
   SELECT 1
   SET COLOR TO  /BR,  /BR
   @ 09,45 SAY SITENO PICT "99"
   @ 12,45 SAY FEATURENO PICT "999999"
   @ 13,45 SAY MCLIN PICT "9999"
   @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
   @ 17,45 SAY MANLDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!"
*
   SET COLOR TO R+/B, R+/B
   STORE "N" TO CHOICE
   @ 22,67 GET CHOICE PICT "!"
   READ
*
*       ENSURE THAT THE USER'S RESPONSE IS EITHER "N", "P" OR "X"
*
        DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
            IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
```

```
201                 SET COLOR TO W+/R,W+/R
202                 @ 24,22 SAY " Response must be either N, P or X "
203                 DO DELAY
204                 STORE "N" TO CHOICE
205             ENDIF
206             SET COLOR TO R+/B,R+/B
207             @ 22,67 GET CHOICE PICT "!"
208             READ
209         ENDDO
210 *
211 *  SKIP TO THE NEXT RECORD TO BE REVIEWED
212 *
213     IF CHOICE = "N" THEN
214         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
215             SKIP
216             IF EOF() = .T. THEN
217                 SKIP - 1
218                 SET COLOR TO W+/R, W+/R
219                 @ 24,21 SAY EOF
220                 DO DELAY
221             ELSE
222                 IF .NOT. (SITENO = MSITE) THEN
223                     SKIP - 1
224                     SET COLOR TO W+/R, W+R
225                     @ 24,21 SAY EOF
226                     DO DELAY
227                 ENDIF
228             ENDIF EOF() = .T.
229         ELSE
230             IF RECNO() = LAST_REC THEN
231                 GO TOP
232             ELSE
233                 SKIP
234             ENDIF
235         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
236     ENDIF CHOICE = "N"
237 *
238 *  SKIP TO THE PREVIOUS RECORD
239 *
240     IF CHOICE = "P" THEN
241         STORE RECNO() TO CURRENTNO
242         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
243             SKIP - 1
244             IF BOF() = .T. THEN
245                 GOTO CURRENTNO
246                 SET COLOR TO W+/R, W+/R
247                 @ 24,16 SAY TOF
248                 DO DELAY
249             ELSE
250                 IF .NOT. (SITENO = MSITE) THEN
```

```
                    SKIP
                    SET COLOR TO W+/R, W+/R
                    @ 24,16 SAY TOF
                    DO DELAY
                ENDIF
            ENDIF BOF() = .T.
        ELSE
            IF RECNO() = FIRST_REC THEN
                GO BOTTOM
            ELSE
                SKIP - 1
            ENDIF
        ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
    ENDIF CHOICE = "P"
*
*  USER HAS DECIDED TO EXIT THE REVIEW
*
    IF CHOICE  = "X"
        EXIT
    ENDIF
*
ENDDO WHILE .T.
*
* RETURN TO CALLING PROGRAM.
*
RELEASE ALL LIKE M*, ACCEPT, CHOICE, CURRENTNO, EOF, FIRST_REC, LAST_REC, TOF
CLOSE DATABASES
RETURN
*************************************************************************
```

Page 1 MANULUPD.PRG Program Listing

```
1  * PROCEDURE MANULUPD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO UPDATE SELECTED RECORDS IN
9  *                   THE MANUAL DATABASE
10 *
11 * INPUT FILES   . : MANUAL.DBF, MANULSIT.NDX
12 *
13 * CALLED BY       : MANULCMD.PRG
14 *
15 * MODULES CALLED : DELAY.PRG
16 *
17 * GLOBAL VARIABLE: HIFNUM, HISITE, LOFNUM LOSITE
18 *
19 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, EOF, ERROR, MCLIN, MDATE,
20 *                  MDESCIPT, MFEAT, MSITE, TOF
21 *
22 * DATE LAST TIME MODIFIED ==========> 26 DECEMBER 1985 <==========
23 *
24 * CASE SELECTION = 2     UPDATE AN EXISTING MANUAL DESCRIPTION
25 *
26 SET ESCAPE OFF
27 SET TALK OFF
28 USE MANUAL
29 GO TOP
30 SET COLOR TO W+/B, W+/B, B
31 CLEAR
32 IF EOF() = .T. THEN
33    SET COLOR TO W+/R, W+/R
34    @ 13,25 SAY " The MANUALS Database is EMPTY! "
35    DO DELAY
36    RETURN
37 ENDIF
38 ?? FLASH + "S.MANUALS.SCR/"
39 @ 24,0 SAY SPACE(80)
40 SET COLOR TO R+/ , R+/
41 @ 3,26 SAY " MANUAL UPDATE FORMAT "
42 SELECT 1
43 STORE " Enter 00 to start at TOF, 99 to start at EOF or a site number " +;
44       "between " + LOSITE + " and " + HISITE + " " TO MESSAGE
45 SET COLOR TO  /W,  /W
46 @ 24,0 SAY MESSAGE
47 STORE '88' TO MSITE
48 DO WHILE .NOT. ((MSITE >=  '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
49    SET COLOR TO  /BR , /BR
50    STORE '00' TO MSITE
```

```
51      @ 09,45 GET MSITE PICT '99'
52      READ
53      IF .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
54          SET COLOR TO W/B, W/B
55          @ 24,0 SAY SPACE(80)
56          SET COLOR TO W+/R, W+/R
57          STORE ' Response must be between ' + LOSITE + ' and ' +;
58                HISITE + ', Zero (00) or 99  ' TO ERROR
59          @ 24,13 SAY ERROR
60          DO DELAY
61          SET COLOR TO  /W,  /W
62          @ 24,0 SAY MESSAGE
63          LOOP
64      ELSE
65          IF (MSITE = '00' .OR. MSITE = '99') THEN
66              USE MANUAL
67              IF MSITE = '00' THEN
68                  GO BOTTOM
69                  STORE RECNO() TO LAST_REC
70                  GO TOP
71                  STORE RECNO() TO FIRST_REC
72              ELSE
73                  GO TOP
74                  STORE RECNO() TO FIRST_REC
75                  GO BOTTOM
76                  STORE RECNO() TO LAST_REC
77              ENDIF MSITE = '00'
78              EXIT
79          ELSE
80              USE MANUAL INDEX MANULSIT
81              GO TOP
82              FIND &MSITE
83              IF EOF() = .T. THEN
84                  SET COLOR TO W/B, W/B
85                  @ 24,0 SAY SPACE(80)
86                  SET COLOR TO W+/R, W+/R
87                  STORE " No records exist for site number " + MSITE +;
88                        ", try again " TO ERROR
89                  @ 24,16 SAY ERROR
90                  DO DELAY
91                  SET COLOR TO  /W,  /W
92                  @ 24,0 SAY MESSAGE
93                  STORE '88' TO MSITE
94                  LOOP
95              ENDIF EOF() = .T.
96          ENDIF (MSITE = '00' .OR. MSITE = '99')
97      ENDIF .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
98  ENDDO WHILE .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
99  *
100 STORE " At beginning of records for site number " +;
```

```
101|        MSITE + " " TO TOF
102| STORE " At end of records for site number " + MSITE + " " TO EOF
103| STORE ' Enter "00    " to start at TOF or a six digit feature' +;
104|       ' number (' + LOFNUM + ' - ' + HIFNUM + ') ' TO MESSAGE
105| IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
106|    SET COLOR TO  /W,  /W
107|    @ 24,0 SAY MESSAGE
108|    DO WHILE .T.
109|        SET COLOR TO  /BR,  /BR
110|        STORE '00    ' TO MFEAT
111|        @ 12,45 GET MFEAT P1CT '999999'
112|        READ
113|        IF .NOT. ((MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
114|            MFEAT = '00    ') THEN
115|            SET COLOR TO W/B, W/B
116|            @ 24,0 SAY SPACE(80)
117|            SET COLOR TO W+/R, W+/R
118|            STORE ' Response must be between ' + LOFNUM + ' and ' +;
119|                  HIFNUM + ' or Zero (00) ' TO ERROR
120|            @ 24,9 SAY ERROR
121|            DO DELAY
122|            SET COLOR TO  /W,  /W
123|            @ 24,0 SAY MESSAGE
124|            LOOP
125|        ELSE
126|            IF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) THEN
127|                IF MFEAT = '99    ' THEN
128|                    SET COLOR TO W/B, W/B
129|                    @ 24,0 SAY SPACE(80)
130|                    SET COLOR TO W+/R, W+/R
131|                    STORE ' Response must be between ' + LOFNUM +;
132|                          'and ' + HIFNUM + ' or Zero (00) ' TO ERROR
133|                    @ 24,9 SAY ERROR
134|                    DO DELAY
135|                    SET COLOR TO  /W,  /W
136|                    @ 24,0 SAY MESSAGE
137|                    LOOP
138|                ENDIF MFEAT = '99    '
139|                STORE MSITE + MFEAT TO MKEY
140|                USE MANUAL INDEX MANULSIT
141|                GO TOP
142|                FIND &MKEY
143|                IF EOF() = .T. THEN
144|                    SET COLOR TO W/B, W/B
145|                    @ 24,0 SAY SPACE(80)
146|                    SET COLOR TO W+/R, W+/R
147|                    STORE " No record with feature number " + MFEAT +;
148|                          " exists, try again " TO ERROR
149|                    @ 24,12 SAY ERROR
150|                    DO DELAY
```

```
151                     SET COLOR TO  /W,  /W
152                     @ 24,0 SAY MESSAGE
153                     LOOP
154                 ELSE
155                     EXIT
156                 ENDIF EOF() = .T.
157             ELSE
158                 GO TOP
159                 EXIT
160             ENDIF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
161         ENDIF
162     ENDDO WHILE .T.
163 ENDIF .NOT. (MSITE >= LOSITE .OR. MSITE <= HISITE)
164 *
165 STORE SPACE(16) + 'Press "Page Down" key to terminate record update' +;
166       SPACE(16) TO MESSAGE
167 STORE 1 TO INTRO
168 DO WHILE .T.
169 *
170 *  INFORM THE USER OF HOW TO TERMINATE THE UPDATE OF A RECORD
171 *
172     IF INTRO = 1 THEN
173         STORE 0 TO INTRO
174         ?? FLASH + "W.MANULUPD/"
175         SET CONSOLE OFF
176         WAIT TO ANS
177         SET CONSOLE ON
178     ENDIF
179 *
180     SET COLOR TO R+/B, R+/B
181     @ 6,47 SAY RECNO() PICT "9999"
182     SET COLOR TO  /W,  /W
183     @ 24,0 SAY MESSAGE
184 *
185 *  STORING THE OLD RECORD TO A WORK RECORD AREA.  THE M PREFIX
186 *  INDICATES MEMORY VARIABLES DISTINGUISHING THEM FROM THEIR
187 *  CORRESPONDING DATABASE FIELDS.
188 *
189 *
190     STORE FEATURENO TO MFEAT
191     STORE MANLDESC TO MMANDESC
192 *
193     SELECT 2
194     USE DESCRIP INDEX DESCRIP
195     FIND &MFEAT
196     STORE CLIN TO MCLIN
197     STORE DESCIPT TO MDESCIPT
198     SELECT 1
199     SET COLOR TO  /BR,  /BR
200     @ 09,45 SAY SITENO PICT "99"
```

```
201     @ 12,45 SAY FEATURENO PICT "999999"
202     @ 13,45 SAY MCLIN PICT "9999"
203     @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
204     @ 17,45 GET MMANDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!"
205     READ
206     SET COLOR TO W/B, W/B
207     @ 24,0 SAY SPACE(80)
208  *
209     IF .NOT. (MANLDESC = MMANDESC) THEN
210  *
211  *       ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES.
212  *
213          SET COLOR TO W+/B, W+/B
214          @20,12 SAY "Do you want to accept the changes?  (Yes or No):"
215          SET COLOR TO R+/B, R+/B
216          @20,49 SAY "Y"
217          @20,56 SAY "N"
218          STORE "N" TO ACCEPT
219          @20,62 GET ACCEPT PICT "!"
220          READ
221  *
222  *       ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
223  *
224          DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
225              IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
226                  SET COLOR TO W+/R, W+/R
227                  @ 24,24 SAY " Response must be either N or Y "
228                  DO DELAY
229                  STORE "N" TO ACCEPT
230              ENDIF
231              SET COLOR TO R+/B, R+/B
232              @20,62 GET ACCEPT PICT "!"
233              READ
234          ENDDO
235          SET COLOR TO W/B, W/B
236          @ 20,10 SAY SPACE(60)
237  *
238          IF ACCEPT = "Y" THEN
239              REPLACE MANLDESC WITH MMANDESC
240          ELSE
241              SET COLOR TO  /BR,  /BR
242              @ 17,45 SAY MANLDESC PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!"
243          ENDIF
244     ENDIF
245  *
246  *
247     SET COLOR TO R+/B, R+/B
248     STORE "N" TO CHOICE
249     @ 22,67 GET CHOICE PICT "!"
250     READ
```

```
*
*       ENSURE THAT THE USER'S RESPONSE IS EITHER "N", "P" OR "X"
*
        DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
            IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
                SET COLOR TO W+/R, W+/R
                @ 24,22 SAY " Response must be either N, P or X "
                DO DELAY
                STORE "N" TO CHOICE
            ENDIF
            SET COLOR TO R+/B, R+/B
            @ 22,67 GET CHOICE PICT "!"
            READ
        ENDDO
*
*   SKIP TO THE NEXT RECORD TO BE REVIEWED
*
    IF CHOICE = "N" THEN
        IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
            SKIP
            IF EOF() = .T. THEN
                SKIP - 1
                SET COLOR TO W+/R, W+/R
                @ 24,21 SAY EOF
                DO DELAY
            ELSE
                IF .NOT. (SITENO = MSITE) THEN
                    SKIP - 1
                    SET COLOR TO W+/R, W+R
                    @ 24,21 SAY EOF
                    DO DELAY
                ENDIF
            ENDIF EOF() = .T.
        ELSE
            IF RECNO() = LAST_REC THEN
                GO TOP
            ELSE
                SKIP
            ENDIF
        ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
    ENDIF CHOICE = "N"
*
*   SKIP TO THE PREVIOUS RECORD
*
    IF CHOICE = "P" THEN
        STORE RECNO() TO CURRENTNO
        IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
            SKIP - 1
            IF BOF() = .T. THEN
                GOTO CURRENTNO
```

```
301                 SET COLOR TO W+/R, W+/R
302                 @ 24,16 SAY TOF
303                 DO DELAY
304             ELSE
305                 IF .NOT. (SITENO = MSITE) THEN
306                     SKIP
307                     SET COLOR TO W+/R, W+/R
308                     @ 24,16 SAY TOF
309                     DO DELAY
310                 ENDIF
311             ENDIF BOF() = .T.
312         ELSE
313             IF RECNO() = FIRST_REC THEN
314                 GO BOTTOM
315             ELSE
316                 SKIP - 1
317             ENDIF
318         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
319     ENDIF CHOICE = "P"
320 *
321 *  USER HAS DECIDED TO EXIT THE REVIEW
322 *
323     IF CHOICE  = "X"
324         EXIT
325     ENDIF
326 *
327 ENDDO WHILE .T.
328 *
329 * RETURN TO CALLING PROGRAM.
330 *
331 RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, ERROR
332 CLOSE DATABASES
333 RETURN
334 ************************************************************************
```

```
1  * PROCEDURE MKLABELS.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER WITH THE CAPABILITY OF RAPIDLY
9  *                   GENERATING MAILING LABELS FOR ALL OF THE SPLICE
10 *                   SITES.
11 *
12 * INPUT FILES     : NONE.
13 *
14 * OUTPUT FILES    : NONE.
15 *
16 * CALLED BY       : MAINMENU.PRG
17 *
18 * MODULES CALLED  : DELAY.PRG
19 *
20 * LOCAL VARIABLES: COPIES, IMAGE, INTRO, LABELS, LAST_LINE,
21 *                   LINECNT, MESSAGE, SKIPONE
22 *
23 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
24 *
25 * GENERATE MAILING LABELS FOR ALL OF THE SPLICE SITES.
26 *
27 SET ESCAPE OFF
28 SET EXACT ON
29 SET TALK OFF
30 SET COLOR TO W/B, W/B, B
31 CLEAR
32 ?? FLASH + "S.MKLABELS.SCR/"
33 @ 24,0 SAY SPACE(80)
34 SET COLOR TO R+/B, R+/B
35 *
36 *  OBTAIN THE NUMBER OF SETS OF LABELS TO PRINT FROM THE USER
37 *
38 STORE SPACE(5) + "Input the number of sets of labels desired" +;
39       " (Range 1 - 10) or 00 TO EXIT" + SPACE(5) TO MESSAGE
40 *
41 STORE "99" TO COPIES
42 DO WHILE .NOT. (COPIES >= "00" .AND. COPIES <= "10")
43    SET COLOR TO  /W,  /W
44    @ 24,0 SAY MESSAGE
45    STORE "00" TO COPIES
46    SET COLOR TO R+/B, R+/B
47    @ 6,55 GET COPIES PICT "99"
48    READ
49    IF .NOT. (COPIES >=  '00' .AND. COPIES <= '10')
50        SET COLOR TO W/B, W/B
```

```
51          @ 24,0 SAY SPACE(80)
52          SET COLOR TO W+/R, W+/R
53          @ 24,22 SAY " Response must be between 00 and 10 "
54          DO DELAY
55          SET COLOR TO  /W,  /W
56          @ 24,0 SAY MESSAGE
57          LOOP
58       ENDIF
59    ENDDO
60    SET COLOR TO W/B, W/B
61    @ 24,0 SAY SPACE(80)
62    *
63    IF COPIES = "00" THEN
64       SET EXACT OFF
65       RELEASE COPIES, MESSAGE
66       RETURN
67    ENDIF
68    *
69    *  START PRINTING LABELS
70    *
71    USE CONFIG INDEX CONFIG
72    GO TOP
73    STORE SPACE(15) + " Performing printer alignment test for label forms" +;
74          SPACE(15) TO MESSAGE
75    STORE "Running label forms alignment print test" TO IMAGE
76    STORE "Y" TO CHOICE
77    STORE 1 TO INTRO
78    STORE 1 TO LINECNT
79    STORE LINECNT + 8 TO SKIPONE
80    *
81    *  ASK THE USER IF A PRINTER ALIGNMENT TEST IS DESIRED
82    *
83    SET COLOR TO W+/B, W+/B
84    @ 22,9 SAY "Do you desire to run a printer alignment test? (Yes or No):  "
85    SET COLOR TO R+/B, R+/B
86    @ 22,57 SAY "Y"
87    @ 22,64 SAY "N"
88    DO WHILE CHOICE = "Y"
89       SET COLOR TO R+/B, R+/B
90       @ 22,70 GET CHOICE PICT "!"
91       READ
92    *
93    *  ENSURE THAT THE USER'S PROMPT IS EITHER "Y" OR "N"
94    *
95       DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "Y")
96           IF .NOT. (CHOICE = "N" .OR. CHOICE = "Y") THEN
97               SET COLOR TO W+/R,W+/R
98               @ 24,24 SAY " Response must be either N or Y "
99               DO DELAY
100              STORE "Y" TO CHOICE
```

```
101         ENDIF .NOT. (CHOICE = "N" .OR. CHOICE = "Y")
102         SET COLOR TO R+/B ,R+/B
103         @ 22,70 GET CHOICE PICT "!"
104         READ
105     ENDDO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "Y")
106 *
107     IF CHOICE = "Y"
108         @ 22,70 SAY " "
109 *
110 *       DISPLAY PRINTER INFORMATION WINDOW TO USER
111 *
112         IF INTRO = 1 THEN
113             STORE 0 TO INTRO
114             ?? FLASH + "W.LABELS/"
115             SET CONSOLE OFF
116             WAIT TO ANS
117             SET CONSOLE ON
118         ENDIF INTRO = 1
119         SET COLOR TO  /W,  /W
120         @ 24,0 SAY MESSAGE
121         SET COLOR TO  /BR,  /BR
122         @ 14,19 SAY IMAGE
123         @ 15,19 SAY IMAGE
124         @ 16,19 SAY IMAGE
125         @ 17,19 SAY IMAGE
126         @ 18,19 SAY IMAGE
127         @ 19,19 SAY IMAGE
128         SET DEVICE TO PRINT
129         DO WHILE LINECNT < SKIPONE
130             @ LINECNT,1 SAY IMAGE
131             LINECNT = LINECNT + 1
132         ENDDO WHILE LINECNT < SKIPONE
133         SKIPONE = LINECNT + 8
134         SET DEVICE TO SCREEN
135         SET COLOR TO W/B, W/B
136         @ 24,0 SAY SPACE(80)
137     ELSE
138         SET COLOR TO  /BR,  /BR
139         @ 14,19 SAY SPACE(40)
140         @ 15,19 SAY SPACE(40)
141         @ 16,19 SAY SPACE(40)
142         @ 17,19 SAY SPACE(40)
143         @ 18,19 SAY SPACE(40)
144         @ 19,19 SAY SPACE(40)
145         LOOP
146     ENDIF CHOICE = "Y"
147 ENDDO WHILE CHOICE = "Y"
148 *
149 *   SKIP ONE BLANK LABEL PRIOR TO PRINTING SITE LABELS
150 *
```

```
151 SET DEVICE TO PRINT
152 *
153 DO WHILE LINECNT < SKIPONE
154     @ LINECNT,1 SAY " "
155     LINECNT = LINECNT + 1
156 ENDDO WHILE LINECNT < SKIPONE
157 *
158 SET DEVICE TO SCREEN
159 *
160 SET COLOR TO W+/B, W+/B
161 @ 21,10 SAY SPACE (60)
162 *
163 *  DISPLAY PRINTER INFORMATION WINDOW TO USER
164 *
165 IF INTRO = 1 THEN
166     STORE 0 TO INTRO
167     ?? FLASH + "W.LABELS/"
168     SET CONSOLE OFF
169     WAIT TO ANS
170     SET CONSOLE ON
171 ENDIF INTRO = 1
172 *
173 STORE SPACE(28) + "Printing Mailing Labels " + SPACE(28) TO MESSAGE
174 SET COLOR TO  /W,  /W
175 @ 24,0 SAY MESSAGE
176 *
177 DO WHILE .NOT. EOF()
178    STORE TRIM(SITECITY) + ", " + TRIM(SITESTATE) + "  " +;
179          TRIM(SITEZIP) TO LAST_LINE
180    SET COLOR TO R+/B, R+/B
181    IF SITECO = "                    " THEN
182        SKIP
183        LOOP
184    ENDIF SITECO = "                    "
185    @ 10,46 SAY SITENO PICT "99"
186    SET COLOR TO  /BR,  /BR
187    @ 15,19 SAY SITECO PICT "!!!!!!!!!!!!!!!!!!!!"
188    @ 16,19 SAY SITENAMEFL PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
189    IF SITEADD1 > "     " THEN
190        @ 17,19 SAY SITEADD1 PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
191        IF SITEADD2 > "     " THEN
192            @ 18,19 SAY SITEADD2 PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
193            @ 19,19 SAY LAST_LINE
194        ELSE
195            @ 18,19 SAY LAST_LINE
196        ENDIF SITEADD2 > "     "
197    ELSE
198        @ 17,19 SAY LAST_LINE
199    ENDIF SITEADD1 > "     "
200    SET DEVICE TO PRINT
```

```
201     STORE 0 TO LABELS
202     DO WHILE LABELS < VAL(COPIES)
203         @ LINECNT,1 SAY SPACE(40)
204         @ LINECNT+1,1 SAY SPACE(40)
205         @ LINECNT+2,1 SAY SITECO PICT "!!!!!!!!!!!!!!!!!!!!"
206         @ LINECNT+3,1 SAY SITENAMEFL
207                           PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
208         IF SITEADD1 > "      " THEN
209             @ LINECNT+4,1 SAY SITEADD1
210                               PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
211             IF SITEADD2 > "      " THEN
212                 @ LINECNT+5,1 SAY SITEADD2
213                                   PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
214                 @ LINECNT+6,1 SAY LAST_LINE
215                 @ LINECNT+7,1 SAY SPACE(40)
216             ELSE
217                 @ LINECNT+5,1 SAY LAST_LINE
218                 @ LINECNT+6,1 SAY SPACE(40)
219                 @ LINECNT+7,1 SAY SPACE(40)
220             ENDIF SITEADD2 > "      "
221         ELSE
222             @ LINECNT+4,1 SAY LAST_LINE
223             @ LINECNT+5,1 SAY SPACE(40)
224             @ LINECNT+6,1 SAY SPACE(40)
225             @ LINECNT+7,1 SAY SPACE(40)
226         ENDIF SITEADD1 > "      "
227         LINECNT = LINECNT+8
228         IF LINECNT > 81 THEN
229             LINECNT = 1
230         ENDIF LINECNT > 81
231         LABELS = LABELS + 1
232     ENDDO WHILE LABELS < COPIES
233     SET DEVICE TO SCREEN
234     @ 14,19 SAY SPACE(40)
235     @ 15,19 SAY SPACE(40)
236     @ 16,19 SAY SPACE(40)
237     @ 17,19 SAY SPACE(40)
238     @ 18,19 SAY SPACE(40)
239     @ 19,19 SAY SPACE(40)
240     SKIP
241 ENDDO WHILE .NOT. EOF()
242 *
243 *  RETURN TO THE CALLING PROGRAM
244 *
245 SET EXACT OFF
246 RELEASE COPIES, IMAGE, INTRO, LABELS, LAST_LINE, LINECNT,;
247         MESSAGE, SKIPONE
248 CLOSE DATABASES
249 RETURN
250 ************************************************************************
```

Page 1 MNLSTRPT.PRG Program Listing

```
1  * PROCEDURE MNLSTRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE MANUAL SITE
9  *                   LEVEL REPORT.
10 *
11 * INPUT FILES     : MANUAL.DBF, TEMPONE.DBF, DESCRIPT.DBF,
12 *                   DESCRIP.NDX
13 *
14 * OUTPUT FILES    : NONE.
15 *
16 * CALLED BY       : SITERPTS.PRG
17 *
18 * MODULES CALLED : DELAY.PRG
19 *
20 * GLOBAL VARIABLE: HISITE, LOSITE
21 *
22 * LOCAL VARIABLES: ACCEPT, CHOICE, ERROR, LINECT, MSITE, PAGENO,
23 *                  TODAY, TODATE
24 *
25 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
26 *
27 * CASE SELECTION = 2    MANUAL SITE LEVEL REPORT
28 *
29 * CREATE THE SPLICE MANUAL SITE REPORT AND CHECK IF THE REPORT
30 * IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
31 *
32 SET ESCAPE OFF
33 SET TALK OFF
34 SET COLOR TO W+/B, W+/B, B
35 CLEAR
36 USE MANUAL
37 GO TOP
38 IF EOF() = .T. THEN
39    SET COLOR TO W+/R, W+/R
40    @ 13,25 SAY " The MANUALS Database is EMPTY! "
41    DO DELAY
42    RETURN
43 ENDIF
44 ?? FLASH + "S.REPORTS.SCR/"
45 @ 24,0 SAY SPACE(80)
46 SET COLOR TO R+/ , R+/
47 @ 2,27 SAY " SITE LEVEL MANUAL REPORT "
48 *
49 *  ENSURE THAT TEMPORARY DATABASE AND INDEX DO NO EXIST, IF SO ERASE THEM
50 *
```

```
SET CONSOLE OFF
ERASE TEMPONE.DBF
ERASE TEMPONE.NDX
SET CONSOLE ON
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY "Enter site number for which the report is desired:"
USE MANUAL INDEX MANULSIT
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No manuals exist for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,16 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .T.
*
SET COLOR TO  /BR,  /BR
@ 13,15 SAY SPACE(55)
*
SET COLOR TO R+/ , R+/
@ 13,13 SAY " CREATING THE TEMPORARY DATABASE AND ASSOCIATED INDEX "
*
*  CREATE THE TEMPORARY DATABASE TO BE USED
*
SET CONSOLE OFF
COPY STRUCTURE TO TEMPONE
USE TEMPONE
APPEND FROM MANUAL FOR SITENO = "&MSITE"
INDEX ON FEATURENO TO TEMPONE
```

```
101 SET CONSOLE ON
102 *
103 *  CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
104 *  IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
105 *
106 SET COLOR TO  /BR,  /BR
107 @ 13,12 SAY SPACE(65)
108 *
109 SET COLOR TO W+/BR, W+/BR
110 @ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
111 SET COLOR TO  /BR,  /BR
112 @ 13,49 SAY "Y"
113 @ 13,56 SAY "N"
114 STORE "N" TO ACCEPT
115 @ 13,62 GET ACCEPT PICT "!"
116 READ
117 *
118 *   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
119 *
120 DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
121     IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
122         SET COLOR TO W+/R,W+/R
123         @ 24,24 SAY " Response must be either N or Y "
124         DO DELAY
125         STORE "N" TO ACCEPT
126     ENDIF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
127     SET COLOR TO  /BR,  /BR
128     @ 13,62 GET ACCEPT PICT "!"
129     READ
130 ENDDO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
131 *
132 SET COLOR TO  /BR,  /BR
133 @ 13,12 SAY SPACE(65)
134 *
135 SELECT 1
136 USE TEMPONE
137 SELECT 2
138 USE DESCRIP INDEX DESCRIP
139 SELECT TEMPONE
140 SET RELATION TO FEATURENO INTO DESCRIP
141 GO TOP
142 *
143 @ 13,12 SAY SPACE(65)
144 *
145 IF ACCEPT = "Y" THEN
146    ?? FLASH + "W.PRINTER/"
147    SET CONSOLE OFF
148    WAIT TO CHOICE
149    SET CONSOLE ON
150    SET COLOR TO W/B, W/B
```

```
201     SET COLOR TO GR+/B, GR+/B
202     @ 5,2  SAY "SITE  CLIN   FEATURE#          DESCRIPTION"
203     @ 5,57 SAY "MANUAL DESCRIPTION"
204     SET COLOR TO  /BR,  /BR
205     STORE 0 TO LINECT
206  *
207     DO WHILE .NOT. EOF()
208        DO WHILE LINECT < 15
209           @ LINECT+7,3  SAY SITENO
210           @ LINECT+7,8  SAY DESCRIP->CLIN
211           @ LINECT+7,16 SAY FEATURENO
212           @ LINECT+7,25 SAY DESCRIP->DESCIPT
213           @ LINECT+7,54 SAY MANLDESC
214           LINECT = LINECT + 1
215           SKIP
216           IF EOF() = .T. THEN
217              SET COLOR TO W+/R, W+/R
218              @ 24,18 SAY " End of File reached, Press any key to EXIT "
219              SET CONSOLE OFF
220              WAIT TO ACCEPT
221              SET CONSOLE ON
222              EXIT
223           ENDIF EOF() = .T.
224        ENDDO WHILE LINECT < 15
225  *
226        IF EOF() = .T. THEN
227            EXIT
228        ENDIF  EOF() = .T.
229        SET COLOR TO R+/B, R+/B
230        STORE "C" TO CHOICE
231        @ 22,57 GET CHOICE PICT "!"
232        READ
233  *
234  *     ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
235  *
236        DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
237            IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
238                SET COLOR TO W+/R, W+/R
239                @ 24,24 SAY " Response must be either C or X "
240                DO DELAY
241                STORE "C" TO CHOICE
242            ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
243            SET COLOR TO R+/B, R+/B
244            @ 22,57 GET CHOICE PICT "!"
245            READ
246        ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
247  *
248  *     DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
249  *
250        IF CHOICE = "C"
```

```
251             SET COLOR TO  /BR,  /BR
252             @ 07,2 SAY SPACE(76)
253             @ 08,2 SAY SPACE(76)
254             @ 09,2 SAY SPACE(76)
255             @ 10,2 SAY SPACE(76)
256             @ 11,2 SAY SPACE(76)
257             @ 12,2 SAY SPACE(76)
258             @ 13,2 SAY SPACE(76)
259             @ 14,2 SAY SPACE(76)
260             @ 15,2 SAY SPACE(76)
261             @ 16,2 SAY SPACE(76)
262             @ 17,2 SAY SPACE(76)
263             @ 18,2 SAY SPACE(76)
264             @ 19,2 SAY SPACE(76)
265             @ 20,2 SAY SPACE(76)
266             @ 21,2 SAY SPACE(76)
267             STORE 0 TO LINECT
268         ELSE
269             EXIT
270         ENDIF CHOICE = "C"
271 *
272     ENDDO WHILE .NOT. EOF()
273 *
274 ENDIF ACCEPT = "Y"
275 *
276 *  ERASE THE TEMPORARY DATABASE AND ASSOCIATED INDEX USED FOR TOTALS
277 *
278 CLOSE DATABASES
279 SET CONSOLE OFF
280 ERASE TEMPONE.DBF
281 ERASE TEMPONE.NDX
282 SET CONSOLE ON
283 SET PRINT OFF
284 *
285 *  RETURN TO CALLING PROGRAM
286 *
287 RELEASE ACCEPT, CHOICE, ERROR, LINECT, MSITE, PAGENO, TODAY, TODATE
288 RETURN
289 ************************************************************************
```

Page 1 NEWDOADD.PRG Program Listing

```
1  * PROCEDURE NEWDOADD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ADD A NEW DELIVERY ORDER TO THE EXISTING EQUIPMENT,
9  *                   MANUAL, AND SERIAL NUMBER DATA BASES WHILE UPDATING
10 *                   ALL INDEXES.  NO TEMP.DBF LINE ITEM WITH A BLANK
11 *                   OR "XXXXXX" FEATURE NUMBER WILL BE ADDED TO THE FILE.
12 *
13 * INPUT FILES     : EQUIP.DBF, MANUAL.DBF, SERIALNO.DBF, TEMP.DBF,
14 *                   NEWDOMOD.DBF, SERNOTMP.DBF.
15 *
16 * OUTPUT FILES    : EQUIP.DBF, MANUAL.DBF, SERIALNO.DBF, TEMP.DBF,
17 *                   NEWDOMOD.DBF, SERNOTMP.DBF.
18 *
19 * CALLED BY       : NEWDOCVT.PRG
20 *
21 * MODULES CALLED : SERNOBLD.PRG
22 *
23 * LOCAL VARIABLES: MESSAGE, MFEAT, MSITE, MINDEX
24 *
25 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
26 *
27 * CLEAR SCREEN. COPY AND MODIFY INPUT FILE TO DATABASE FORMAT FOR
28 * ALL RECORDS THAT DON'T HAVE A BLANK OR "XXXXXX" IN THE FEATURE NUMBER.
29 *
30 SET COLOR TO R+/ , R+/
31 @ 15,24 SAY " UPDATING THE EQUIPMENT DATABASE "
32 STORE "         Adding new records to the EQUIPMENT database" +;
33       ",  PLEASE BE PATIENT          " TO MESSAGE
34 SET COLOR TO  /W,  /W
35 @ 24,0 SAY MESSAGE
36 USE EQUIP
37 COPY STRUCTURE TO NEWDOMOD
38 USE NEWDOMOD
39 APPEND FROM TEMP.DBF FOR FEATURENO <> '       ' .AND. FEATURENO <> 'XXXXXX'
40 *
41 * FILL-IN THE EFFECTIVE DELIVERY ORDER DATE FIELD WITH THE DATE SUPPLIED
42 * BY THE USER AND ADD THE DELIVERY ORDER TO THE EQUIPMENT DATABASE.
43 *
44 REPLACE ALL EFFDATE WITH MEFFDATE
45 USE EQUIP INDEX EQUIPDAT, EQUIPSIT, EQUIPPRJ, EQUIPSD, EFEAT
46 APPEND FROM NEWDOMOD
47 *
48 * ADDING THE NEW RECORDS FOR THE MANUAL DATABASE.
49 *
50 SET COLOR TO R+/ , R+/
```

```
@ 15,24 SAY "  UPDATING THE MANUALS DATABASE  "
STORE "       Adding new records to the MANUAL database" +;
      ",  PLEASE BE PATIENT          " TO MESSAGE
SET COLOR TO  /W,  /W
@ 24,0 SAY MESSAGE
CLOSE DATABASES
SELECT 1
USE MANUAL INDEX MANULSIT
SELECT 2
USE NEWDOMOD
*
DO WHILE .NOT. EOF()
     STORE SITENO TO MSITE
     STORE FEATURENO TO MFEAT
     STORE SITENO + FEATURENO TO MINDEX
     SELECT 1
     GO TOP
     FIND &MINDEX
     IF EOF( )
        GO BOTTOM
        INSERT BLANK
        REPLACE FEATURENO WITH "&MFEAT"
        REPLACE SITENO WITH "&MSITE"
     ENDIF
     SELECT 2
     SKIP
ENDDO WHILE .NOT. EOF()
*
* BUILDING A DUMMY SERIAL NUMBER FILE WHICH WILL BE MODIFIED AND
* EXPANDED WHEN ALL DELIVERY ORDERS HAVE BEEN LOADED.
*
SET COLOR TO R+/ , R+/
@ 15,24 SAY " BUILDING THE SERIAL NUMBER FILE "
STORE "      Adding new records to the SERIAL NUMBER database, " +;
      " PLEASE BE PATIENT      " TO MESSAGE
SET COLOR TO  /W,  /W
@ 24,0 SAY MESSAGE
USE SERIALNO
COPY STRUCTURE TO SERNOTMP
USE SERNOTMP
APPEND FROM NEWDOMOD
*
*  CALL THE PROGRAM TO BUILD THE BLANK SERIAL NUMBER RECORDS
*
DO SERNOBLD
STORE " Appending new records to the database may be a long process," +;
      " PLEASE BE PATIENT  " TO MESSAGE
SET COLOR TO  /W,  /W
@ 24,0 SAY MESSAGE
SET COLOR TO R+/ , R+/
```

```
101 | @ 15,12 SAY " APPENDING NEW RECORDS TO THE SERIAL NUMBER DATABASE "
102 | USE SERIALNO INDEX SERNOPRJ, SERNOSIT, SERNODAT, SERNOFEA
103 | APPEND FROM SERNOTMP
104 | SET COLOR TO W/B, W/B
105 | @ 15,10 SAY SPACE(65)
106 | @ 24,0 SAY SPACE(80)
107 | *
108 | *  RETURNING TO THE CALLING PROGRAM.
109 | *
110 | CLOSE DATABASES
111 | RETURN
112 | ********************************************************************************
```

Page 1 NEWDOCMD.PRG Program Listing

```
1  * PROCEDURE NEWDOCMD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : LOAD NEW DELIVERY ORDERS TO THE DATABASE FILES.
9  *
10 * INPUT FILES     : NONE.
11 *
12 * OUTPUT FILES    : NONE.
13 *
14 * CALLED BY       : MAINMENU.PRG.
15 *
16 * MODULES CALLED : NEWDOCVT.PRG
17 *
18 * LOCAL VARIABLES: SELEKT
19 *
20 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
21 *
22 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR SELECTION
23 *
24 STORE "1" TO SELEKT
25 DO WHILE SELEKT < "2"
26    SET COLOR TO W/B, W/B
27    CLEAR
28    ?? FLASH + "W.NEWDOCMD/"
29    SET CONSOLE OFF
30    WAIT TO SELEKT
31    SET CONSOLE ON
32 *
33 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
34 *
35    DO CASE
36 *
37 *       CALL THE NEW DELIVERY ORDER CONVERT AND LOAD PROGRAM.
38        CASE SELEKT = "1"
39            DO NEWDOCVT
40 *
41 *        RETURN TO THE MAINMENU PROGRAM.
42         CASE SELEKT = "2"
43 *
44    ENDCASE
45 *
46 ENDDO  (WHILE SELEKT = "2")
47 *
48 *  RETURN TO THE CALLING PROGRAM
49 *
50 RETURN
```

```
51| ************************************************************************
```

Page 1 NEWDOCVT.PRG Program Listing

```
1  * PROCEDURE NEWDOCVT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO COMPARE AN INCOMING NEW DELIVERY ORDER TO THE
9  *                   EXISTING EQUIPMENT DATABASE AND CHECK FOR DUPLICATE
10 *                   SITE NUMBER AND DELIVERY ORDER DATE.  IF THE SITE
11 *                   NUMBER AND DELIVERY DATE ARE UNIQUE OR THE USER
12 *                   DECIDES TO LOAD THE DUPLICATE SITE NUMBER/DELIVERY
13 *                   ORDER ANYWAY THEN THE NEW DELIVERY ORDER ADD
14 *                   PROGRAM IS CALLED.  WHEN ALL DELIVERY ORDERS ARE
15 *                   ADDED THEN SPECIFIED INDEXES ARE UPDATED.
16 *
17 * INPUT FILES     : TED.DBF, EQUIP.DBF, MANUAL.DBF, SERIALNO.DBF, NEW
18 *                   DELIVERY ORDER .PRN FILE, EFFDATE.NDX, EQUIPSIT.NDX,
19 *                   EQUIPPRJ.NDX, MANULSIT.NDX, SERNOPRJ.NDX, SERNOSIT.NDX,
20 *                   SERNODAT.NDX, NEWDOMOD.DBF, TEMP.DBF, SERNOTMP.DBF,
21 *                   EFEAT.NDX
22 *
23 * OUTPUT FILES    : EQUIP.DBF, MANUAL.DBF, SERIAL.DBF, EFFDATE.NDX,
24 *                   EQUIPSIT.NDX, EQUIPPRJ.NDX, MANULSIT.NDX, EFEAT.NDX
25 *                   SERNOPRJ.NDX, SERNOSIT.NDX, SERNODAT.NDX.
26 *
27 * CALLED BY       : NEWDOCMD.PRG
28 *
29 * MODULES CALLED : NEWDOADD.PRG, DELAY.PRG
30 *
31 * GLOBAL VARIABLE: HIDATE, HISITE, LODATE, LOSITE
32 *
33 * LOCAL VARIABLES: ACCEPT, CHOICE, DBNAME, ERASIT, ERROR, MDAY, MEFFDATE,
34 *                  MESSAGE, MKEY, MMONTH, MOLDATE, MSITE, MYEAR, NOFILE
35 *
36 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
37 *
38 * SET UP INITIAL STRUCTURE AND RECEIVE INPUT INFORMATION.
39 * AND START LOOP PROCESS.
40 *
41 SET ESCAPE OFF
42 SET TALK OFF
43 SET COLOR TO W+/B, W+/B, B
44 ?? FLASH +"S.NEWDOCVT.SCR/"
45 @ 24,0 SAY SPACE(80)
46 STORE "Are all input entries correct? (Yes or No):" to CORRECT
47 DO WHILE .T.
48 *
49 *  OBTAIN THE INPUT VALUES FROM THE USER
50 *
```

```
51      DO WHILE .T.
52          STORE SPACE(18) + "Enter the name of the .PRN file to be loaded" +;
53                SPACE(18) TO MESSAGE
54          SET COLOR TO  /W,  /W
55          @ 24,0 SAY MESSAGE
56          STORE "SPLICE  " TO DBNAME
57          STORE DTOC(DATE()) TO SYSDATE
58          STORE SUBSTR(SYSDATE,7,2) + SUBSTR(SYSDATE,1,2) +;
59                SUBSTR(SYSDATE,4,2) TO MEFFDATE
60          STORE "01" TO MSITE
61          SET COLOR TO  /BR,  /BR
62          @ 6,54  GET DBNAME PICT "!!!!!!!!"
63          READ
64          STORE 0 TO NOFILE
65  *
66          DO WHILE .NOT. FILE(TRIM(DBNAME)+".PRN")
67              SET COLOR TO W/B, W/B
68              @ 24,0 SAY SPACE(80)
69              SET COLOR TO W+/R, W+/R
70              @ 24,24 SAY " File does not exist, try again "
71              DO DELAY
72              NOFILE = NOFILE + 1
73              IF NOFILE = 3 THEN
74                  SET COLOR TO W+/BG, W+/BG
75                  @ 17,15 SAY " Do you want to exit this process? (Yes or No): "
76                  SET COLOR TO  /BG,  /BG
77                  @ 17,51 SAY "Y"
78                  @ 17,58 SAY "N"
79                  STORE "Y" TO ACCEPT
80                  @ 17,63 GET ACCEPT PICT "!"
81                  READ
82                  DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
83                      IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
84                          SET COLOR TO W+/R, W+/R
85                          @ 24,24 SAY " Response must be either N or Y "
86                          DO DELAY
87                          STORE "Y" TO ACCEPT
88                      ENDIF
89                      SET COLOR TO  /BG,  /BG
90                      @ 17,63 GET ACCEPT PICT "!"
91                      READ
92                  ENDDO
93                  IF ACCEPT = "Y" THEN
94                      SET CONSOLE OFF
95                      CLOSE DATABASES
96                      ERASE TEMP.DBF
97                      ERASE NEWDOMOD.DBF
98                      ERASE SERNOTMP.DBF
99                      SET CONSOLE ON
100                     RELEASE ALL LIKE M*, ACCEPT, CHOICE, CORRECT, DBNAME,;
```

```
                            ERASIT, NOFILE, SYSDATE
                    RETURN
                ELSE
                    NOFILE = 0
                ENDIF
                SET COLOR TO W+/B, W+/B
                @ 17,10 SAY SPACE(55)
            ENDIF
            SET COLOR TO  /W,  /W
            @ 24,0 SAY MESSAGE
            STORE "SPLICE  " TO DBNAME
            SET COLOR TO  /BR,  /BR
            @ 6,54 GET DBNAME PICT "!!!!!!!!"
            READ
        ENDDO
        STORE TRIM(DBNAME) + ".PRN" TO DBNAME
        USE TED
        COPY TO TEMP.DBF
        USE TEMP.DBF
        APPEND FROM &DBNAME SDF
        GO TOP
*
*       HAVE THE USER SPECIFY THE EFFECTIVE DATE OF THE DELIVERY ORDER
*
        STORE SPACE(17) + "Input Effective Date  (Range " + LODATE +;
             " to " + HIDATE + ")" + SPACE(17) TO MESSAGE
        SET COLOR TO  /W,  /W
        @ 24,0 SAY MESSAGE
        STORE "000000" TO MOLDATE
        DO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
            STORE MEFFDATE TO MOLDATE
            SET COLOR TO  /BR,  /BR
            @ 8,54 GET MOLDATE PICT "999999"
            READ
            DO WHILE .T.
            IF .NOT. (SUBSTR(MOLDATE,1,2) > "83" .AND.;
                      SUBSTR(MOLDATE,1,2) <= "99") THEN
                SET COLOR TO W/B, W/B
                @ 24,0 SAY SPACE(80)
                SET COLOR TO W+/R, W+/R
                @ 24,16 SAY " Year portion of date must be between 84 and 99 "
                DO DELAY
                SET COLOR TO  /W,  /W
                @ 24,0 SAY MESSAGE
                STORE SUBSTR(MEFFDATE,1,2) TO MYEAR
                SET COLOR TO  /BR,  /BR
                @ 8,54 GET MYEAR PICT "99"
                READ
                STORE MYEAR + SUBSTR(MOLDATE,3,4) TO MOLDATE
                LOOP
```

```
151             ELSE
152                 EXIT
153             ENDIF
154             ENDDO WHILE .T.
155 *
156             DO WHILE .T.
157             IF .NOT. (SUBSTR(MOLDATE,3,2) >= "01" .AND.;
158                       SUBSTR(MOLDATE,3,2) <= "12") THEN
159                 SET COLOR TO W/B, W/B
160                 @ 24,0 SAY SPACE(80)
161                 SET COLOR TO W+/R, W+/R
162                 @ 24,16 SAY " Month portion of date must be between 01 and 12 "
163                 DO DELAY
164                 SET COLOR TO  /W,  /W
165                 @ 24,0 SAY MESSAGE
166                 STORE SUBSTR(MEFFDATE,3,2) TO MMONTH
167                 SET COLOR TO  /BR,  /BR
168                 @ 8,56 GET MMONTH PICT "99"
169                 READ
170                 STORE SUBSTR(MOLDATE,1,2) + MMONTH +;
171                       SUBSTR(MOLDATE,5,2) TO MOLDATE
172                 LOOP
173             ELSE
174                 EXIT
175             ENDIF
176             ENDDO WHILE .T.
177 *
178             DO WHILE .T.
179             IF ((SUBSTR(MOLDATE,3,2) = "04" .OR. SUBSTR(MOLDATE,3,2) = "06" .OR.;
180                 SUBSTR(MOLDATE,3,2) = "09" .OR. SUBSTR(MOLDATE,3,2) = "11") .AND.;
181             .NOT.(SUBSTR(MOLDATE,5,2) >= "01" .AND. SUBSTR(MOLDATE,5,2) <= "30"))
182                 SET COLOR TO W/B, W/B
183                 @ 24,0 SAY SPACE(80)
184                 SET COLOR TO W+/R, W+/R
185                 @ 24,16 SAY " Day portion of date must be between 01 and 30 "
186                 DO DELAY
187                 SET COLOR TO  /W,  /W
188                 @ 24,0 SAY MESSAGE
189                 STORE SUBSTR(MEFFDATE,5,2) TO MDAY
190                 SET COLOR TO  /BR,  /BR
191                 @ 8,58 GET MDAY PICT "99"
192                 READ
193                 STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
194                 LOOP
195             ELSE
196 *
197             IF (SUBSTR(MOLDATE,3,2) = "02" .AND. .NOT.;
198                (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
199                 SUBSTR(MOLDATE,5,2) <= "28")) THEN
200                 SET COLOR TO W/B, W/B
```

```
201                 @ 24,0 SAY SPACE(80)
202                 SET COLOR TO W+/R, W+/R
203                 @ 24,16 SAY " Day portion of date must be between 01 and 28 "
204                 DO DELAY
205                 SET COLOR TO  /W,  /W
206                 @ 24,0 SAY MESSAGE
207                 STORE SUBSTR(MEFFDATE,5,2) TO MDAY
208                 SET COLOR TO  /BR,  /BR
209                 @ 8,58 GET MDAY PICT "99"
210                 READ
211                 STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
212                 LOOP
213             ELSE
214 *
215             IF .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
216                       SUBSTR(MOLDATE,5,2) <= "31") THEN
217                 SET COLOR TO W/B, W/B
218                 @ 24,0 SAY SPACE(80)
219                 SET COLOR TO W+/R, W+/R
220                 @ 24,16 SAY " Day portion of date must be between 01 and 31 "
221                 DO DELAY
222                 SET COLOR TO  /W,  /W
223                 @ 24,0 SAY MESSAGE
224                 STORE SUBSTR(MEFFDATE,5,2) TO MDAY
225                 SET COLOR TO  /BR,  /BR
226                 @ 8,58 GET MDAY PICT "99"
227                 READ
228                 STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
229                 LOOP
230             ELSE
231                 EXIT
232             ENDIF
233             ENDIF
234             ENDIF
235         ENDDO WHILE .T.
236         ENDDO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
237 *
238         STORE MOLDATE TO MEFFDATE
239         SET COLOR TO W/B, W/B
240         @ 24,0 SAY SPACE(80)
241         STORE SPACE(8) + "Enter site number of Delivery Order to be " +;
242               "loaded to the database" + SPACE(8) TO MESSAGE
243         SET COLOR TO  /W,  /W
244         @ 24,0 SAY MESSAGE
245         SET COLOR TO  /BR,  /BR
246         @ 11,54 SAY SITENO PICT "99"
247         @ 13,54 GET MSITE PICT "99"
248         READ
249  *
250         DO WHILE .NOT. (MSITE >=  LOSITE .AND. MSITE <= HISITE)
```

```
251             IF .NOT. (MSITE >=  LOSITE .AND. MSITE <= HISITE)
252                 SET COLOR TO W/B, W/B
253                 @ 24,0 SAY SPACE(80)
254                 SET COLOR TO W+/R, W+/R
255                 STORE ' Response must be between ' + LOSITE +;
256                       ' and ' + HISITE  + ' ' TO ERROR
257                 @ 24,21 SAY ERROR
258                 DO DELAY
259                 SET COLOR TO  /W,  /W
260                 @ 24,0 SAY MESSAGE
261                 SET COLOR TO  /BR,  /BR
262                 STORE '01' TO MSITE
263                 @ 13,54 GET MSITE PICT "99"
264                 READ
265              ENDIF
266         ENDDO
267 *
268 *       ASK THE USER IF THE INPUTS ARE VALID OR NOT
269 *
270         SET COLOR TO W+/B, W+/B
271         @ 24,0 SAY SPACE(80)
272         @ 16,17 SAY CORRECT
273         SET COLOR TO R+/B, R+/B
274         @ 16,49 SAY "Y"
275         @ 16,56 SAY "N"
276         STORE "N" TO ACCEPT
277         @ 16,62 GET ACCEPT PICT "!"
278         READ
279 *
280 *       ENSURE THAT THE RESPONSE IS EITHER "Y" OR "N"
281 *
282         DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
283             IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
284                 SET COLOR TO W+/R, W+/R
285                 @ 24,24 SAY " Response must be either N or Y "
286                 DO DELAY
287                 STORE "N" TO ACCEPT
288             ENDIF
289             SET COLOR TO R+/B, R+/B
290             @ 16,62 GET ACCEPT PICT "!"
291             READ
292         ENDDO
293         SET COLOR TO W+/B, W+/B
294         @ 16,15 SAY SPACE(55)
295 *
296         IF ACCEPT = "Y" THEN
297 *
298 *           ASK THE USER IF THE INPUT ".PRN" FILE IS TO BE ERASED
299 *
300             SET COLOR TO W+/B, W+/B
```

```
301             STORE "Do you want to erase the input file " + DBNAME +;
302                     "?  (Yes or No): " TO MESSAGE
303             @ 16,10 SAY MESSAGE
304             STORE "N" TO ERASIT
305             SET COLOR TO R+/B, R+/B
306             @ 16,46 SAY DBNAME
307             @ 16,45+LEN(DBNAME)+5  SAY "Y"
308             @ 16,45+LEN(DBNAME)+12 SAY "N"
309             @ 16,45+LEN(DBNAME)+17 GET ERASIT PICT "!"
310             READ
311 *
312 *           ENSURE THAT THE RESPONSE IS EITHER "Y" OR "N"
313 *
314             DO WHILE .NOT. (ERASIT = "N" .OR. ERASIT = "Y")
315                 IF .NOT. (ERASIT = "N" .OR. ERASIT = "Y") THEN
316                     SET COLOR TO W+/R, W+/R
317                     @ 24,24 SAY " Response must be either N or Y "
318                     DO DELAY
319                     STORE "N" TO ERASIT
320                 ENDIF
321                 SET COLOR TO R+/B, R+/B
322                 @ 16,45+LEN(DBNAME)+17  GET ERASIT PICT "!"
323                 READ
324             ENDDO
325             SET COLOR TO W+/B, W+/B
326             @ 16,10 SAY SPACE(65)
327 *
328             IF ERASIT = "Y" THEN
329                 ERASE &DBNAME
330             ENDIF
331             EXIT
332         ELSE
333             SET COLOR TO  /BR,  /BR
334             @ 8,54 SAY "      "
335             @ 11,54 SAY "  "
336             @ 13,54 SAY "  "
337             LOOP
338         ENDIF
339     ENDDO WHILE .T.
340 *
341     SET COLOR TO W+/B, W+/B
342     @ 16,10 SAY SPACE(65)
343     REPLACE ALL SITENO WITH "&MSITE"
344     USE EQUIP INDEX EQUIPSD
345     STORE MEFFDATE + MSITE TO MKEY
346     GO TOP
347     IF EOF() = .T. THEN
348         DO NEWDOADD
349     ELSE
350         FIND &MKEY
```

```
351         IF EOF() = .T. THEN
352            DO NEWDOADD
353         ELSE
354             SET COLOR TO R+*/ , R+*/
355             @ 16,21 SAY " THIS IS A DUPLICATE DELIVERY ORDER! "
356             SET COLOR TO W+/B, W+/B
357             @ 17,17 SAY " Do you still desire to load it? (Yes or No):  "
358             SET COLOR TO R+/B, R+/B
359             @ 17,51 SAY "Y"
360             @ 17,58 SAY "N"
361             STORE "N" TO ACCEPT
362             @ 17,63 GET ACCEPT PICT "!"
363             READ
364             DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
365                 IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
366                     SET COLOR TO W+/R, W+/R
367                     @ 24,24 SAY " Response must be either N or Y "
368                     DO DELAY
369                     STORE "N" TO ACCEPT
370                 ENDIF
371                 SET COLOR TO R+/B, R+/B
372                 @ 17,63 GET ACCEPT PICT "!"
373                 READ
374             ENDDO
375             SET COLOR TO W/B, W/B
376             @ 16,20 SAY SPACE(50)
377             @ 17,15 SAY SPACE(55)
378             IF ACCEPT = "Y" THEN
379                 DO NEWDOADD
380             ENDIF
381         ENDIF
382     ENDIF
383     *
384     * CHECK TO SEE IF THERE ARE MORE DELIVERY ORDERS TO BE ADDED.
385     *
386     SET COLOR TO R+/B, R+/B
387     STORE "N" TO CHOICE
388     @ 21,68 GET CHOICE PICT "!"
389     READ
390 *
391 *  ENSURE THAT THE RESPONSE IS EITHER "Y" OR "N"
392 *
393     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "Y")
394         IF .NOT. (CHOICE = "N" .OR. CHOICE = "Y") THEN
395             SET COLOR TO W+/R, W+/R
396             @ 24,24 SAY " Response must be either N or Y "
397             DO DELAY
398             STORE "N" TO CHOICE
399         ENDIF
400         SET COLOR TO R+/B, R+/B
```

```
401         @ 21,68 GET CHOICE PICT "!"
402         READ
403      ENDDO
404   *
405      IF CHOICE = "N" THEN
406         EXIT
407      ELSE
408         SET COLOR TO W/B, W/B
409         @ 19,10 SAY SPACE(65)
410         @ 21,68 SAY " "
411         SET COLOR TO  /BR,  /BR
412         @ 8,54 SAY "      "
413         @ 11,54 SAY "  "
414         @ 13,54 SAY "  "
415      ENDIF
416   *
417   ENDDO WHILE .T.
418   *
419   *  ERASE ALL TEMPORARY DBF FILES CREATED DURING THE LOAD
420   *
421   SET COLOR TO R+/ , R+/
422   @ 15,26 SAY " ERASING TEMPORARY DATABASES "
423   CLOSE DATABASES
424   SET CONSOLE OFF
425   ERASE TEMP.DBF
426   ERASE NEWDOMOD.DBF
427   ERASE SERNOTMP.DBF
428   SET CONSOLE ON
429   *
430   *  RETURN TO THE CALLING PROGRAM
431   *
432   RELEASE ALL LIKE M*, ACCEPT, CHOICE, CORRECT, DBNAME, ERASIT, ERROR,;
433           NOFILE, SYSDATE
434   RETURN
435   ************************************************************************
```

Page 1 PROJRPTS.PRG Program Listing

```
1  * PROCEDURE PROJRPTS.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SELECTION OF PROJECT LEVEL REPORTS.
9  *
10 * INPUT FILES     : NONE.
11 *
12 * OUTPUT FILES    : NONE.
13 *
14 * CALLED BY       : REPORCMD.PRG
15 *
16 * MODULES CALLED : EQPPJRPT.PRG, SNOPJRPT.PRG
17 *
18 * LOCAL VARIABLES: PROJRPTS
19 *
20 * DATE LAST TIME MODIFIED ==========> 18 DECEMBER 1985 <==========
21 *
22 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE SELECTION.
23 *
24 STORE "1" TO PROJRPTS
25 DO WHILE PROJRPTS < "3"
26    SET COLOR TO W/B, W/B, B
27    CLEAR
28    ?? FLASH + "W.PROJRPTS/"
29    SET CONSOLE OFF
30    WAIT TO PROJRPTS
31    SET CONSOLE ON
32 *
33 *  PROCESS ROUTINE BASED ON THE USER"S SELECTION.
34 *
35    DO CASE
36 *
37 *       CALL THE EQUIPMENT PROJECT LEVEL REPORT.
38        CASE PROJRPTS = "1"
39            DO EQPPJRPT
40 *
41 *       CALL THE SERIAL NUMBER PROJECT LEVEL REPORT.
42        CASE PROJRPTS = "2"
43            DO SNOPJRPT
44 *
45 *       RETURN TO THE SPLICE REPORTING LEVEL MENU.
46        CASE PROJRPTS = "3"
47 *
48    ENDCASE
49 *
50 ENDDO  (WHILE PROJRPTS = "3")
```

```
51| *
52| *  RETURN TO THE CALLING PROGRAM
53| *
54| RETURN
55| ************************************************************************
```

Page 1 REPORCMD.PRG Program Listing

```
1  * PROCEDURE REPORCMD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER AN OPPORTUNITY TO SELECT A REPORT
9  *                   LEVEL - PROJECT LEVEL, SITE LEVEL, OR DELIVERY ORDER
10 *                   DATE LEVEL.
11 *
12 * INPUT FILES     : NONE.
13 *
14 * OUTPUT FILES    : NONE.
15 *
16 * MODULES CALLED : PROJRPTS.PRG, SITERPTS.PRG, DATERPTS.PRG
17 *
18 * LOCAL VARIABLES: SELEKT
19 *
20 * DATE LAST TIME MODIFIED ==========> 22 DECEMBER 1985 <==========
21 *
22 * DISPLAY THE REPORT LEVEL MENU TO THE USER AND WAIT FOR THE SELECTION.
23 *
24 STORE "1" TO SELEKT
25 DO WHILE SELEKT < "4"
26    SET COLOR TO W/B, W/B, B
27    CLEAR
28    ?? FLASH + "W.REPORCMD/"
29    SET CONSOLE OFF
30    WAIT TO SELEKT
31    SET CONSOLE ON
32 *
33 *  PROCESS ROUTINE BASED ON THE USER"S SELECTION.
34 *
35    DO CASE
36 *
37 *       CALL THE PROJECT LEVEL REPORTS PROGRAM.
38        CASE SELEKT = "1"
39            DO PROJRPTS
40 *
41 *       CALL THE SITE LEVEL REPORTS PROGRAM.
42        CASE SELEKT = "2"
43            DO SITERPTS
44 *
45 *       CALL THE EFFECTIVE DELIVERY ORDER DATE LEVEL REPORTS PROGRAM.
46        CASE SELEKT = "3"
47            DO DATERPTS
48 *
49 *       RETURN TO THE MAIN MENU PROGRAM.
50        CASE SELEKT = "4"
```

```
51| *
52|    ENDCASE
53| *
54| ENDDO  (WHILE SELEKT < "4")
55| *
56| *  RETURN TO THE CALLING PROGRAM
57| *
58| RETURN
59| ************************************************************************
```

```
1  * PROCEDURE NAME : SELECTOR.PRG
2  *
3  * AUTHORS        : LCDR EDWARD J. CASE, SC, USN
4  *                  LCDR WINSTON H. BUCKLEY, SC, USN
5  *                  LCDR ROBERT F. BRADO, USN
6  *                  LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE        : TO PERMIT THE USER TO SELECT THE DESIRED PROCESSING
9  *                  ACTION.  CHOICES INCLUDE:  THE SPLICE CONFIGURER,
10 *                  LOTUS 1-2-3 FOR "WHAT-IF" ANALYSIS, AND THE dBASE III
11 *                  SPLICE CONFIGURATION MANAGEMENT SYSTEM.  CHANGES TO
12 *                  ACTIVE DIRECTORITES AND CALLS TO dBASE EXTERNAL PROGRAMS
13 *                  ARE EFFECTED WITH THE dBASE "RUN" COMMAND.
14 *
15 * INPUT FILES    : NONE.
16 *
17 * OUTPUT FILES   : NONE.
18 *
19 * MODULES CALLED : SPLICE.COM; 123.EXE, MAINMENU.PRG, DELAY.PRG, WS.COM
20 *
21 * GLOBAL VARIABLE: FLASH
22 *
23 * LOCAL VARIABLES: ANS
24 *
25 * DATE LAST TIME MODIFIED ==========> 18 DECEMBER 1985 <==========
26 *
27 * DBASE PROGRAM CONFIGURATION VARIABLES:
28 *
29 SET BELL OFF
30 SET CONSOLE ON
31 SET INTENSITY OFF
32 SET SCOREBOARD OFF
33 SET TALK OFF
34 *
35 *  DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE USER'S CHOICE.
36 *
37 PUBLIC FLASH
38 ?? CHR(145) + "L.SPLICE.WIN/"
39 STORE "1" TO ANS
40 DO WHILE .T.
41    SET COLOR TO W+/B, W+/B, B
42    CLEAR
43    FLASH = CHR(145)
44    ?? FLASH + "S.SELECTOR.SCR/"
45    @ 24,0 SAY SPACE (80)
46    SET COLOR TO R+/B,R+/B
47    @ 21,53 GET ANS PICT "9"
48    READ
49    DO WHILE (ANS < "1" .OR. ANS > "6")
50        IF (ANS < "1" .OR. ANS > "6") THEN
```

```
51|            SET COLOR TO W+/R,W+/R
52|            @ 24,23 SAY " Response must be between 1 and 6 "
53|            DO DELAY
54|            STORE "1" TO ANS
55|        ENDIF
56|        SET COLOR TO R+/B,R+/B
57|        @ 21,53 GET ANS PICT "9"
58|        READ
59|    ENDDO
60| *
61| *  PERFORM APPROPRIATE TASK BASED ON THE USER'S CHOICE.
62| *
63|    DO CASE
64| *
65| *      CHANGE THE ACTIVE DIRECTORY TO TURBO AND CALL SPLICE.COM.
66| *      COPY THE OUTPUT .PRN FILE TO THE dBASE III SUBDIRECTORY.
67| *
68|        CASE ANS = "1"
69|            RUN CD\TURBO
70|            RUN SPLICE.COM
71|            RUN COPY *.PRN \DBASEIII\*.PRN
72|            RUN CD\DBASEIII
73|            STORE "1" TO ANS
74| *
75| *      CHANGE THE ACTIVE SUBDIRECTORY TO LOTUS AND CALL 123.EXE.  THE USER
76| *      SUBDIRECTORY WHILE IN LOTUS MUST BE dBASE III.
77| *
78|        CASE ANS = "2"
79|            RUN CLS
80|            RUN ECHO WHEN IN 123, CHANGE THE DEFAULT DIRECTORY TO DBASEIII
81|            RUN PAUSE
82|            RUN CD\LOTUS
83|            RUN 123
84|            RUN CD\DBASEIII
85|            STORE "2" TO ANS
86| *
87| *      CALL THE CONFIGURATION MANAGEMENT SYSTEM dBASE III PROGRAM
88| *
89|        CASE ANS = "3"
90|            DO MAINMENU
91|            STORE "3" TO ANS
92| *
93| *      CHANGE THE ACTIVE DIRECTORY TO WORSTAR AND EDIT THE USER'S MANUAL
94| *
95|        CASE ANS = "4"
96|            RUN CLS
97|            RUN CD\WORDSTAR
98|            RUN COPY USERS.MAN SPLICE.MAN
99|            RUN WS.COM SPLICE.MAN
100|           RUN DEL SPLICE.MAN
```

```
101             RUN CD\DBASEIII
102             STORE "4" TO ANS
103  *
104  *
105  *       RETURN THE USER TO dBASE SYSTEM CONTROL.
106  *
107          CASE ANS = "5"
108              CLEAR
109              CLEAR ALL
110              EXIT
111  *
112  *       RETURN THE USER TO OPERATING SYSTEM CONTROL.
113  *
114          CASE ANS = "6"
115              CLEAR
116              CLEAR ALL
117              STORE 0 TO CONTINUE
118              QUIT
119  *
120      ENDCASE
121  *
122  *  CONTINUE PROCESSING LOOP CONTROL CHECK.
123  *
124  ENDDO WHILE .T.
125  ************************************************************************
```

Page 1 SERNOBLD.PRG Program Listing

```
1  * PROCEDURE SERNOBLD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO BUILD BLANK SERIAL NUMBER RECORDS.
9  *
10 * INPUT FILES     : SERNOTMP.DBF
11 *
12 * OUTPUT FILES    : SERNOTMP.DBF
13 *
14 * MODULES CALLED : NONE
15 *
16 * CALLED BY       : NEWDOADD.PRG
17 *
18 * LOCAL VARIABLES: CTOTQTY, INITIAL, MEFFDATE, MFEATURE, MQTY,
19 *                   MSERIALN, MSITE, REC_COUNT
20 *
21 * DATE LAST TIME MODIFIED ==========> 23 DECEMBER 1985 <==========
22 *
23 *  IF NOT EOF, DETERMINE THE COMPONENT QUANTITY.  WHILE THE QUANTITY
24 *  IS GREATER THAN 1, BUILD AND EXPAND A BLANK SERIAL NUMBER RECORD.
25 *
26 STORE 1 TO INITIAL
27 USE SERNOTMP
28 GO TOP
29 DO WHILE .T.
30    IF EOF() = .T. THEN
31        EXIT
32    ELSE
33 *
34 *       IF NOT EOF AND NOT A BLANK RECORD, STORE ITEMS TO MEMORY VARIABLES.
35 *
36          IF INITIAL = 1 THEN
37              SET COLOR TO GR+/B, GR+/B
38              @ 17,21 SAY "FEATURE:"
39              @ 17,40 SAY "RECORD NUMBER:"
40              @ 19,18 SAY "Building and expanding sub-record "
41              @ 19,56 SAY "of"
42              STORE 0 TO INITIAL
43          ENDIF
44          SET COLOR TO  /BR,  /BR
45          @ 17,31 SAY FEATURENO PICT "999999"
46          SET COLOR TO R+/B, R+/B
47          @ 17,55 SAY RECNO() PICT "9999"
48          SET COLOR TO W+/BG, W+/BG
49          STORE 1 TO REC_COUNT
50          @ 19,52 SAY REC_COUNT PICT "999"
```

```
51          @ 19,59 SAY QTY PICT "999"
52          STORE EFFDATE TO MEFFDATE
53          STORE SITENO TO MSITE
54          STORE FEATURENO TO MFEATURE
55          STORE QTY TO MQTY, CTOTQTY
56          REPLACE TOTQTY WITH MQTY
57          STORE '          ' TO MSERIALN
58          DO WHILE MQTY > 1
59              REC_COUNT = REC_COUNT + 1
60              @ 19,52 SAY REC_COUNT PICT "999"
61              INSERT BLANK
62              REPLACE TOTQTY WITH CTOTQTY
63              REPLACE QTY WITH MQTY - 1
64              REPLACE EFFDATE WITH MEFFDATE
65              REPLACE SITENO WITH MSITE
66              REPLACE FEATURENO WITH MFEATURE
67              REPLACE SERIALNO WITH MSERIALN
68              MQTY = MQTY - 1
69          ENDDO WHILE MQTY > 1
70  *
71          SKIP
72      ENDIF EOF() = .T.
73  *
74  ENDDO WHILE .T.
75  *
76  *  CLEAR OUT THE STATUS FIELD LINES
77  *
78  SET COLOR TO W+/B, W+/B
79  @ 15,10 SAY SPACE(60)
80  @ 17,10 SAY SPACE(60)
81  @ 19,10 SAY SPACE(60)
82  *
83  *  RETURN TO THE CALLING PROGRAM
84  *
85  RELEASE ALL LIKE M*, CTOTQTY, INITIAL, REC_COUNT
86  CLOSE DATABASES
87  RETURN
88  ************************************************************************
```

```
1  * PROCEDURE SERNOCMD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER THE OPPORTUNITY TO INPUT
9  *                   THE COMPONENT SERIAL NUMBER OR REVIEW THE
10 *                   THE SERIAL NUMBER DATABASE RECORDS.
11 *
12 * INPUT FILES     : NONE
13 *
14 * OUTPUT FILES    : NONE
15 *
16 * CALLED BY       : MAINMENU.PRG
17 *
18 * MODULES CALLED : SERNOUPD.PRG, SERNOREV.PRG
19 *
20 * LOCAL VARIABLES: SELEKT
21 *
22 * DATE LAST TIME MODIFIED ==========> 26 DECEMBER 1985 <==========
23 *
24 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE SELECTION.
25 *
26 STORE "1" TO SELEKT
27 DO WHILE SELEKT < "3"
28    SET COLOR TO W/B, W/B, B
29    CLEAR
30    ?? FLASH + "W.SERNOCMD/"
31    SET CONSOLE OFF
32    WAIT TO SELEKT
33    SET CONSOLE ON
34 *
35 *  PROCESS ROUTINE BASED ON THE USER'S SELECTION.
36 *
37    DO CASE
38 *
39 *       CALL THE SERIAL NUMBER UPDATE PROGRAM.
40        CASE SELEKT = "1"
41            DO SERNOUPD
42 *
43 *       CALL SERIAL NUMBER REVIEW PROGRAM.
44        CASE SELEKT = "2"
45            DO SERNOREV
46 *
47 *       RETURN TO THE MAIN MENU PROGRAM.
48        CASE SELEKT = "3"
49 *
50    ENDCASE
```

```
51| *
52| ENDDO  (WHILE SELEKT < "3")
53| *
54| *  RETURN TO THE CALLING PROGRAM
55| *
56| RETURN
57| ************************************************************************
```

```
1  * PROCEDURE SERNOREV.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO REVIEW ALL RECORDS IN THE
9  *                   SERIAL NUMBER DATABASE.
10 *
11 * INPUT FILES     : SERIALNO.DBF, SERNOSIT.NDX
12 *
13 * OUTPUT FILES    : SERIALNO.DBF, SERNOSIT.NDX
14 *
15 * CALLED BY       : SERNOCMD.PRG
16 *
17 * MODULES CALLED  : DELAY.PRG
18 *
19 * GLOBAL VARIABLE: HIFNUM, HISITE, LOFNUM, LOSITE
20 *
21 * LOCAL VARIABLES: ACCEPT, CHOICE, CURRENTNO, EOF, FIRST_REC, LAST_REC,
22 *                  MFEAT, MFEATURE, MSITE, TOF
23 *
24 * DATE LAST TIME MODIFIED ==========> 26 DECEMBER 1985 <==========
25 *
26 * CASE SELECTION = 2     REVIEW SERIAL NUMBER FILE RECORDS
27 *
28 * USE SERIAL NUMBER DATABASE INDEXED ON SITE NUMBER AND WAIT FOR THE
29 * USER TO INPUT THE SITE NUMBER, THEN START REVIEWING FROM THAT POINT.
30 *
31 SET ESCAPE OFF
32 SET TALK OFF
33 SELECT 1
34 USE SERIALNO
35 GO TOP
36 SET COLOR TO W+/B, W+/B, B
37 CLEAR
38 IF EOF() = .T. THEN
39    SET COLOR TO W+/R, W+/R
40    @ 13,22 SAY " The SERIAL NUMBER Database is EMPTY! "
41    DO DELAY
42    RETURN
43 ENDIF
44 ?? FLASH + "S.SERIALNO.SCR/"
45 SET COLOR TO W+/B, W+/B
46 @ 24,0 SAY SPACE(80)
47 SET COLOR TO R+/ , R+/
48 @ 3,26 SAY " SERIAL NUMBER REVIEW FORMAT "
49 STORE " Enter 00 to start at TOF, 99 to start at EOF or a site number " +;
50       "between " + LOSITE + " and " + HISITE + " " TO MESSAGE
```

```
*
DO WHILE .T.
   SET COLOR TO  /W,  /W
   @ 24,0 SAY MESSAGE
   SET COLOR TO  /BR,  /BR
   STORE '00' TO MSITE
   @ 09,20 GET MSITE PICT '99'
   READ
   IF .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR.;
             MSITE = '99') THEN
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R,W+/R
       STORE ' Response must be between ' + LOSITE + ' and ' +;
             HISITE + ', Zero (00) or 99 ' TO ERROR
       @ 24,13 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       IF (MSITE = '00' .OR. MSITE = '99') THEN
           IF MSITE = '00' THEN
               GO BOTTOM
               STORE RECNO() TO LAST_REC
               GO TOP
               STORE RECNO() TO FIRST_REC
           ELSE
               GO TOP
               STORE RECNO() TO FIRST_REC
               GO BOTTOM
               STORE RECNO() TO LAST_REC
           ENDIF MSITE = '00'
           EXIT
       ELSE
           USE SERIALNO INDEX SERNOSIT
           GO TOP
           FIND &MSITE
           IF EOF() = .T. THEN
               SET COLOR TO W/B, W/B
               @ 24,0 SAY SPACE(80)
               SET COLOR TO W+/R, W+/R
               STORE " No records exist for site number " + MSITE +;
                     ", try again " TO ERROR
               @ 24,16 SAY ERROR
               DO DELAY
               LOOP
           ELSE
               EXIT
           ENDIF EOF() = .T.
       ENDIF (MSITE = '00' .OR. MSITE = '99')
   ENDIF .NOT. ((MSITE >= '00' .AND. MSITE <= HISITE) .OR. MSITE = '99')
```

```
ENDDO WHILE .T.
*
STORE SPACE(10) + 'Enter "00    " to start at TOF or a six digit ' +;
      'feature number' + SPACE(10) TO MESSAGE
IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
   DO WHILE .T.
       SET COLOR TO  /W,  /W
       @ 24,0 SAY MESSAGE
       SET COLOR TO  /BR,  /BR
       STORE '00    ' TO MFEAT
       @ 13,45 GET MFEAT PICT '999999'
       READ
       IF .NOT. ((MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) .OR.;
           MFEAT = '00    ') THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' Response must be between ' + LOFNUM + ' and ' +;
                 HIFNUM + ' or Zero (00) ' TO ERROR
           @ 24,9 SAY ERROR
           DO DELAY
          LOOP
       ELSE
           IF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
               IF MFEAT = '99    ' THEN
                   SET COLOR TO W/B, W/B
                   @ 24,0 SAY SPACE(80)
                   SET COLOR TO W+/R, W+/R
                   STORE ' Response must be between ' + LOFNUM +;
                         ' and ' + HIFNUM + ' or Zero (00) ' TO ERROR
                   @ 24,9 SAY ERROR
                   DO DELAY
                   LOOP
               ENDIF MFEAT = '99    '
               STORE MSITE + MFEAT TO MKEY
               USE SERIALNO INDEX SERNOFEA
               GO TOP
               FIND &MKEY
               IF EOF() = .T. THEN
                   SET COLOR TO W/B, W/B
                   @ 24,0 SAY SPACE(80)
                   SET COLOR TO W+/R, W+/R
                   STORE " No record with feature number " + MFEAT +;
                         " exists, try again " TO ERROR
                   @ 24,12 SAY ERROR
                   DO DELAY
                   LOOP
               ELSE
                   EXIT
               ENDIF EOF() = .T.
```

```
151             ELSE
152                 EXIT
153             ENDIF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
154         ENDIF
155     ENDDO WHILE .T.
156 ENDIF .NOT. (MSITE >= LOSITE .OR. MSITE <= HISITE)
157 *
158 STORE " At beginning of records for site number " +;
159         MSITE + " " TO TOF
160 STORE " At end of records for site number " + MSITE + " " TO EOF
161 SET COLOR TO W/B, W/B
162 @ 24,0 SAY SPACE(80)
163 *
164 DO WHILE .T.
165 *
166 *  USING THE SERIAL NUMBER REVIEW FORMAT FILE TO PRODUCE THE SCREEN
167 *  DISPLAY, IF NOT AT THE END OF FILE.
168 *
169     STORE FEATURENO TO MFEATURE
170     SELECT 2
171     USE DESCRIP INDEX DESCRIP
172     FIND &MFEATURE
173     STORE CLIN TO MCLIN
174     STORE DESCIPT TO MDESCIPT
175     SELECT 1
176     SET COLOR TO R+/B, R+/B
177     @ 6,45 SAY RECNO() PICT "9999"
178     SET COLOR TO  /BR,  /BR
179     @ 9,20  SAY SITENO PICT "99"
180     @ 9,68  SAY EFFDATE PICT "999999"
181     @ 12,45 SAY MCLIN PICT "9999"
182     @ 13,45 SAY FEATURENO PICT "999999"
183     @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
184     @ 15,45 SAY TOTQTY PICT "999"
185     SET COLOR TO W+/BG, W+/BG
186     @ 17,45 SAY QTY PICT "999"
187     @ 17,52 SAY TOTQTY PICT "999"
188     SET COLOR TO  /BR,  /BR
189     @ 19,45 SAY SERIALNO PICT "!!!!!!!!"
190 ENDIF
191 *
192     SET COLOR TO R+/B, R+/B
193     STORE "N" TO CHOICE
194     @ 22,68 GET CHOICE PICT "!"
195     READ
196 *
197 *  ENSURE THAT THE USER'S PROMPT IS EITHER "N", "P" OR "X"
198 *
199     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
200         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
```

```
201             SET COLOR TO W+/R, W+/R
202             @ 24,23 SAY " Response must be either N, P or X "
203             DO DELAY
204             STORE "N" TO CHOICE
205         ENDIF
206         SET COLOR TO R+/B, R+/B
207         @ 22,68 GET CHOICE PICT "!"
208         READ
209     ENDDO
210 *
211     SET COLOR TO W+/R, W+/R
212 *
213 *   SKIP TO THE NEXT RECORD TO BE REVIEWED
214 *
215     IF CHOICE = "N" THEN
216         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
217             SKIP
218             IF EOF() = .T. THEN
219                 SKIP - 1
220                 @ 24,21 SAY EOF
221                 DO DELAY
222                 LOOP
223             ELSE
224                 IF .NOT. (SITENO = MSITE) THEN
225                     SKIP - 1
226                     @ 24,21 SAY EOF
227                     DO DELAY
228                     LOOP
229                 ENDIF
230             ENDIF EOF() = .T.
231         ELSE
232             IF RECNO() = LAST_REC THEN
233                 GO TOP
234             ELSE
235                 SKIP
236             ENDIF
237         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
238     ENDIF CHOICE = "N"
239 *
240 *   SKIP TO THE PREVIOUS RECORD
241 *
242     IF CHOICE = "P" THEN
243         STORE RECNO() TO CURRENTNO
244         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
245             SKIP - 1
246             IF BOF() = .T. THEN
247                 GOTO CURRENTNO
248                 @ 24,16 SAY TOF
249                 DO DELAY
250                 LOOP
```

```
251             ELSE
252                 IF .NOT. (SITENO = MSITE) THEN
253                     SKIP
254                     @ 24,16 SAY TOF
255                     DO DELAY
256                     LOOP
257                 ENDIF
258             ENDIF BOF() = .T.
259         ELSE
260             IF RECNO() = FIRST_REC THEN
261                 GO BOTTOM
262             ELSE
263                 SKIP - 1
264             ENDIF
265         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE')
266     ENDIF CHOICE = "P"
267 *
268 *  USER HAS DECIDED TO EXIT THE REVIEW
269 *
270     IF CHOICE  = "X"
271         EXIT
272     ENDIF
273 ENDDO WHILE .T.
274 *
275 * RETURN TO CALLING PROGRAM.
276 *
277 RELEASE ALL LIKE M*, ACCEPT, CHOICE, CURRENTNO, EOF, FIRST_REC,;
278         LAST_REC, TOF
279 CLOSE DATABASES
280 RETURN
281 ************************************************************************
```

Page 1 SERNOUPD.PRG Program Listing

```
1  * PROCEDURE SERNOUPD.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : TO ENABLE THE USER TO INPUT THE SERIAL NUMBERS FOR
9  *                   THE SERIAL NUMBER DATABASE.
10 *
11 * INPUT FILES     : SERIALNO.DBF, SERNOSIT.NDX
12 *
13 * OUTPUT FILES    : SERIALNO.DBF, SERNOSIT.NDX
14 *
15 * CALLED BY       : SERNOCMD.PRG
16 *
17 * MODULES CALLED : DELAY.PRG
18 *
19 * GLOBAL VARIABLE: HIDATE, HIFNUM, HISITE, LODATE, LOFNUM, LOSITE
20 *
21 * LOCAL VARIABLES: ACCEPT, ANS, CHOICE, CURRENTNO, EOF, INTRO, MDATE,;
22 *                  MDAY, MESSAGE, MMONTH, MOLDATE, MYEAR, NODATE,;
23 *                  NOFIND, SYSDATE, TOF
24 *
25 * DATE LAST TIME MODIFIED ==========> 26 DECEMBER 1985 <==========
26 *
27 * CASE SELECTION = 2     REVIEW SERIAL NUMBER FILE RECORDS
28 *
29 * USE SERIAL NUMBER DATABASE INDEXED ON SITE NUMBER AND WAIT FOR THE
30 * USER TO INPUT THE SITE NUMBER, THEN START REVIEWING FROM THAT POINT.
31 *
32 SET ESCAPE OFF
33 SET TALK OFF
34 SELECT 1
35 USE SERIALNO
36 GO TOP
37 SET COLOR TO W+/B, W+/B, B
38 CLEAR
39 IF EOF() = .T. THEN
40    SET COLOR TO W+/R, W+/R
41    @ 13,22 SAY " The SERIAL NUMBER Database is EMPTY! "
42    DO DELAY
43    RETURN
44 ENDIF
45 ?? FLASH + "S.SERIALNO.SCR/"
46 SET COLOR TO W+/B, W+/B
47 @ 24,0 SAY SPACE(80)
48 SET COLOR TO R+/ , R+/
49 @ 3,26 SAY " SERIAL NUMBER UPDATE FORMAT "
50 STORE SPACE(22) + "Enter a Site Number between " + LOSITE +;
```

```
      " and " + HISITE + SPACE(21) TO MESSAGE
USE SERIALNO INDEX SERNOSIT
*
DO WHILE .T.
   SET COLOR TO  /W,  /W
   @ 24,0 SAY MESSAGE
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 09,20 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
       SET COLOR TO W/B, W/B
       @ 24,0 SAY SPACE(80)
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE " No records exist for site number " + MSITE +;
                 ", try again " TO ERROR
           @ 24,16 SAY ERROR
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >=  LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .NOT. (MSITE >=  LOSITE .AND. MSITE <= HISITE)
*
STORE SPACE(17) + 'Input Effective Date  (Range ' + LODATE +;
      ' to ' + HIDATE + ')' + SPACE(17) TO MESSAGE
STORE DTOC(DATE()) TO SYSDATE
STORE SUBSTR(SYSDATE,7,2) + SUBSTR(SYSDATE,1,2) +;
      SUBSTR(SYSDATE,4,2) TO MDATE
STORE 0 TO NOFIND
STORE "000000" TO MOLDATE
USE SERIALNO INDEX SERNODAT
*
DO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
   SET COLOR TO  /W,  /W
   @ 24,0 SAY MESSAGE
   STORE MDATE TO MOLDATE
```

```
101     SET COLOR TO  /BR,  /BR
102     @ 9,68 GET MOLDATE PICT "999999"
103     READ
104     DO WHILE .T.
105         IF .NOT. (SUBSTR(MOLDATE,1,2) > "83" .AND.;
106                   SUBSTR(MOLDATE,1,2) <= "99") THEN
107             SET COLOR TO W/B, W/B
108             @ 24,0 SAY SPACE(80)
109             SET COLOR TO W+/R, W+/R
110             STORE " Year portion of date must be between 84 and 99 ";
111                   TO ERROR
112             @ 24,16 SAY ERROR
113             DO DELAY
114             SET COLOR TO  /W,  /W
115             @ 24,0 SAY MESSAGE
116             STORE SUBSTR(MDATE,1,2) TO MYEAR
117             SET COLOR TO  /BR,  /BR
118             @ 9,68 GET MYEAR PICT "99"
119             READ
120             STORE MYEAR + SUBSTR(MOLDATE,3,4) TO MOLDATE
121             LOOP
122         ELSE
123             EXIT
124         ENDIF
125     ENDDO WHILE .T.
126 *
127     DO WHILE .T.
128     .   IF .NOT. (SUBSTR(MOLDATE,3,2) >= "01" .AND.;
129                   SUBSTR(MOLDATE,3,2) <= "12") THEN
130             SET COLOR TO W/B, W/B
131             @ 24,0 SAY SPACE(80)
132             SET COLOR TO W+/R, W+/R
133             @ 24,16 SAY " Month portion of date must be between 01 and 12 "
134             DO DELAY
135             SET COLOR TO  /W,  /W
136             @ 24,0 SAY MESSAGE
137             STORE SUBSTR(MDATE,3,2) TO MMONTH
138             SET COLOR TO  /BR,  /BR
139             @ 9,70 GET MMONTH PICT "99"
140             READ
141             STORE  SUBSTR(MOLDATE,1,2) + MMONTH +;
142                    SUBSTR(MOLDATE,5,2) TO MOLDATE
143             LOOP
144         ELSE
145             EXIT
146         ENDIF
147     ENDDO WHILE .T.
148 *
149     DO WHILE .T.
150         IF ((SUBSTR(MOLDATE,3,2)="04" .OR. SUBSTR(MOLDATE,3,2)="06" .OR.;
```

```
151             SUBSTR(MOLDATE,3,2)="09" .OR. SUBSTR(MOLDATE,3,2)="11") .AND.;
152             .NOT. (SUBSTR(MOLDATE,5,2)>="01" .AND.;
153             SUBSTR(MOLDATE,5,2)<="30")) THEN
154             SET COLOR TO W/B, W/B
155             @ 24,0 SAY SPACE(80)
156             SET COLOR TO W+/R, W+/R
157             @ 24,16 SAY " Day portion of date must be between 01 and 30 "
158             DO DELAY
159             SET COLOR TO  /W,  /W
160             @ 24,0 SAY MESSAGE
161             STORE SUBSTR(MDATE,5,2) TO MDAY
162             SET COLOR TO  /BR,  /BR
163             @ 9,72 GET MDAY PICT "99"
164             READ
165             STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
166             LOOP
167         ELSE
168 *
169         IF (SUBSTR(MOLDATE,3,2) = "02" .AND. .NOT.;
170            (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
171             SUBSTR(MOLDATE,5,2) <= "28")) THEN
172             SET COLOR TO W/B, W/B
173             @ 24,0 SAY SPACE(80)
174             SET COLOR TO W+/R, W+/R
175             @ 24,16 SAY " Day portion of date must be between 01 and 28 "
176             DO DELAY
177             SET COLOR TO  /W,  /W
178             @ 24,0 SAY MESSAGE
179             STORE SUBSTR(MDATE,5,2) TO MDAY
180             SET COLOR TO  /BR,  /BR
181             @ 9,72 GET MDAY PICT "99"
182             READ
183             STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
184             LOOP
185         ELSE
186 *
187         IF .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
188                   SUBSTR(MOLDATE,5,2) <= "31") THEN
189             SET COLOR TO W/B, W/B
190             @ 24,0 SAY SPACE(80)
191             SET COLOR TO W+/R, W+/R
192             @ 24,16 SAY " Day portion of date must be between 01 and 31 "
193             DO DELAY
194             SET COLOR TO  /W,  /W
195             @ 24,0 SAY MESSAGE
196             STORE SUBSTR(MDATE,5,2) TO MDAY
197             SET COLOR TO  /BR,  /BR
198             @ 9,72 GET MDAY PICT "99"
199             READ
200             STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
```

```
            LOOP
        ELSE
            EXIT
        ENDIF
        ENDIF
        ENDIF
    ENDDO WHILE .T.
*
*   SEE IF THE USER'S DATE IS A VALID DATE FOR THE SITE SELECTED
*
    STORE MSITE + MOLDATE TO MKEY
    GO TOP
    FIND &MKEY
    IF EOF() = .T. THEN
        NOFIND = NOFIND + 1
        IF NOFIND = 3 THEN
            SET COLOR TO W+/B, W+/B
            @ 24,0  SAY SPACE(80)
            ?? FLASH + "W.SERNOFND/"
            SET CONSOLE OFF
            WAIT TO ANS
            SET CONSOLE ON
            IF ANS = "2" THEN
                RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE,;
                        CURRENTNO, EOF, INTRO, NODATE,;
                        NOFIND, SYSDATE, TOF
                CLOSE DATABASES
                RETURN
            ELSE
                SET COLOR TO  /W,  /W
                @ 24,0 SAY MESSAGE
                STORE 0 TO NOFIND
                STORE '000000' TO MOLDATE
                LOOP
            ENDIF ANS = "2"
        ELSE
            SET COLOR TO W/B, W/B
            @ 24,0 SAY SPACE(80)
            STORE " EFFECTIVE DATE " + MOLDATE + " does not exist for site " +;
                  MSITE + ", try another " TO NODATE
            SET COLOR TO W+/R, W+/R
            @ 24,10 SAY NODATE
            DO DELAY
            SET COLOR TO  /W,  /W
            @ 24,0 SAY MESSAGE
            STORE "000000" TO MOLDATE
            LOOP
        ENDIF NOFIND = 3
    ENDIF EOF() = .T.
ENDDO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
```

```
*
STORE SPACE(10) + 'Enter a six digit feature number between ' + LOFNUM +;
      ' and ' + HIFNUM  + SPACE(11) TO MESSAGE
SET COLOR TO  /W,  /W
@ 24,0 SAY MESSAGE
STORE '999999' TO MFEAT
STORE 0 TO NOFIND
*
DO WHILE .T.
   DO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
       SET COLOR TO  /BR,  /BR
       STORE '010201' TO MFEAT
       @ 13,45 GET MFEAT PICT '999999'
       READ
       IF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) THEN
           SET COLOR TO W/B, W/B
           @ 24,0 SAY SPACE(80)
           SET COLOR TO W+/R, W+/R
           STORE ' Response must be between ' + LOFNUM +;
                 ' and ' + HIFNUM + ' ' TO ERROR
           @ 24,17 SAY ERROR
           DO DELAY
           SET COLOR TO  /W,  /W
           @ 24,0 SAY MESSAGE
           LOOP
       ELSE
           IF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM) THEN
               USE DESCRIP INDEX DESCRIP
               GO TOP
               FIND &MFEAT
               IF EOF() = .T. THEN
                   NOFIND = NOFIND + 1
                   IF NOFIND = 3 THEN
                       SET COLOR TO W+/B, W+/B
                       @ 24,0  SAY SPACE(80)
                       ?? FLASH + "W.SERNOFND/"
                       SET CONSOLE OFF
                       WAIT TO ANS
                       SET CONSOLE ON
                       IF ANS = "2" THEN
                           RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE,;
                                   CURRENTNO, EOF, INTRO, NODATE,;
                                   NOFIND, SYSDATE, TOF
                           CLOSE DATABASES
                           RETURN
                       ELSE
                           SET COLOR TO  /W,  /W
                           @ 24,0 SAY MESSAGE
                           STORE 0 TO NOFIND
                           STORE '999999' TO MFEAT
```

```
                        LOOP
                    ENDIF ANS = "2"
                ELSE
                    SET COLOR TO W/B, W/B
                    @ 24,0 SAY SPACE(80)
                    SET COLOR TO W+/R, W+/R
                    STORE " No record exists for feature number " +;
                          MFEAT + ", try again " TO ERROR
                    @ 24,12 SAY ERROR
                    DO DELAY
                    SET COLOR TO  /W,  /W
                    @ 24,0 SAY MESSAGE
                    STORE '999999' TO MFEAT
                    LOOP
                ENDIF NOFIND = 3
            ENDIF EOF() = .T.
        ENDIF (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
    ENDIF .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
ENDDO WHILE .NOT. (MFEAT >= LOFNUM .AND. MFEAT <= HIFNUM)
*
STORE MOLDATE + MSITE + MFEAT TO MKEY
USE SERIALNO INDEX SERNOPRJ
GO TOP
FIND &MKEY
IF EOF() = .T. THEN
    SET COLOR TO W/B, W/B
    @ 24,0 SAY SPACE(80)
    SET COLOR TO W+/R, W+/R
    STORE "   Feature number " + MFEAT + " for site " + MSITE +;
          " on date " + MOLDATE +;
          " does not exist, try again    " TO ERROR
    @ 24,0 SAY ERROR
    DO DELAY
    SET COLOR TO W+/B, W+/B
    ?? FLASH + "W.SERNOFND/"
    SET CONSOLE OFF
    WAIT TO ANS
    SET CONSOLE ON
    IF ANS = "2" THEN
        RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, CURRENTNO, EOF,;
                INTRO, NODATE, NOFIND, SYSDATE, TOF
        CLOSE DATABASES
        RETURN
    ELSE
        SET COLOR TO W/B, W/B
        @ 21,10 SAY SPACE(60)
        SET COLOR TO  /W,  /W
        @ 24,0 SAY MESSAGE
        STORE '999999' TO MFEAT
        LOOP
```

```
351         ENDIF ANS = "2"
352     ELSE
353         EXIT
354     ENDIF EOF() = .T.
355 ENDDO WHILE .T.
356 *
357 STORE " At beginning of records for site number " +;
358       MSITE + " " TO TOF
359 STORE " At end of records for site number " + MSITE + " " TO EOF
360 SET COLOR TO W/B, W/B
361 @ 24,0 SAY SPACE(80)
362 *
363 STORE SPACE(16) + 'Press "Page Down" key to terminate record update' +;
364       SPACE(16) TO MESSAGE
365 STORE 1 TO INTRO
366 DO WHILE .T.
367     SET COLOR TO  /W,  /W
368     @ 24,0 SAY MESSAGE
369 *
370 *  USING THE SERIAL NUMBER UPDATE FORMAT FILE TO PRODUCE THE SCREEN
371 *  DISPLAY, IF NOT AT THE END OF FILE.
372 *
373     STORE SERIALNO TO MSERIAL
374     STORE FEATURENO TO MFEAT
375 *
376 *  INFORM THE USER OF HOW TO TERMINATE THE UPDATE OF A RECORD
377 *
378     IF INTRO = 1 THEN
379         STORE 0 TO INTRO
380         ?? FLASH + "W.SERNOUPD/"
381         SET CONSOLE OFF
382         WAIT TO ANS
383         SET CONSOLE ON
384     ENDIF
385 *
386     SELECT 2
387     USE DESCRIP INDEX DESCRIP
388     FIND &MFEAT
389     STORE CLIN TO MCLIN
390     STORE DESCIPT TO MDESCIPT
391     SELECT 1
392     SET COLOR TO R+/B, R+/B
393     @ 6,45 SAY RECNO() PICT "9999"
394     SET COLOR TO  /BR,  /BR
395     @ 9,20  SAY SITENO PICT "99"
396     @ 9,68  SAY EFFDATE PICT "999999"
397     @ 12,45 SAY MCLIN PICT "9999"
398     @ 13,45 SAY MFEAT PICT "999999"
399     @ 14,45 SAY MDESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!"
400     @ 15,45 SAY TOTQTY PICT "999"
```

```
401     SET COLOR TO W+/BG, W+/BG
402     @ 17,45 SAY QTY PICT "999"
403     @ 17,52 SAY TOTQTY PICT "999"
404     SET COLOR TO  /BR,  /BR
405     @ 19,45 GET MSERIAL PICT "!!!!!!!!"
406     READ
407     SET COLOR TO W/B, W/B
408     @ 24,0 SAY SPACE(80)
409  *
410     IF .NOT. (SERIALNO = MSERIAL) THEN
411  *
412  *       ASK THE USER IF HE/SHE DESIRES TO ACCEPT THE CHANGES
413  *
414          SET COLOR TO W+/B, W+/B
415          @ 21,12 SAY "Do you want to accept the change?  (Yes or No):"
416          SET COLOR TO R+/B, R+/B
417          @ 21,48 SAY "Y"
418          @ 21,55 SAY "N"
419          STORE "N" TO ACCEPT
420          @ 21,61 GET ACCEPT PICT "!"
421          READ
422  *
423  *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
424  *
425          DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
426              IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
427                  SET COLOR TO W+/R, W+/R
428                  @ 24,24 SAY " Response must be either N or Y "
429                  DO DELAY
430                  STORE "N" TO ACCEPT
431              ENDIF
432              SET COLOR TO R+/B, R+/B
433              @ 21,61 GET ACCEPT PICT "!"
434              READ
435          ENDDO
436          SET COLOR TO W/B, W/B
437          @ 21,10 SAY SPACE(55)
438  *
439  *       STORE THE CHANGED EDIT FIELD FROM THE WORK AREA INTO THE
440  *       DATABASE VARIABLE
441  *
442          IF ACCEPT = "Y" THEN
443              REPLACE SERIALNO WITH MSERIAL
444          ELSE
445              SET COLOR TO  /BR,  /BR
446              @ 19,45 SAY SERIALNO PICT "!!!!!!!!"
447          ENDIF ACCEPT = "Y"
448     ENDIF .NOT. (SERIALNO = MSERIAL)
449  *
450     SET COLOR TO R+/B, R+/B
```

```
451     STORE "N" TO CHOICE
452     @ 22,68 GET CHOICE PICT "!"
453     READ
454  *
455  *  ENSURE THAT THE USER'S RESPONSE IS EITHER "N", "P" OR "X"
456  *
457     DO WHILE .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X")
458         IF .NOT. (CHOICE = "N" .OR. CHOICE = "P" .OR. CHOICE = "X") THEN
459             SET COLOR TO W+/R, W+/R
460             @ 24,23 SAY " Response must be either N, P or X "
461             DO DELAY
462             STORE "N" TO CHOICE
463         ENDIF
464         SET COLOR TO R+/B, R+/B
465         @ 22,68 GET CHOICE PICT "!"
466         READ
467     ENDDO
468  *
469  *  SKIP TO THE NEXT RECORD TO BE REVIEWED
470  *
471     IF CHOICE = "N" THEN
472         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
473             SKIP
474             IF EOF() = .T. THEN
475                 SKIP - 1
476                 SET COLOR TO W+/R, W+/R
477                 @ 24,21 SAY EOF
478                 DO DELAY
479             ELSE
480                 IF .NOT. (SITENO = MSITE) THEN
481                     SKIP - 1
482                     SET COLOR TO W+/R, W+R
483                     @ 24,21 SAY EOF
484                     DO DELAY
485                 ENDIF
486             ENDIF EOF() = .T.
487         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
488     ENDIF CHOICE = "N"
489  *
490  *  SKIP TO THE PREVIOUS RECORD
491  *
492     IF CHOICE = "P" THEN
493         STORE RECNO() TO CURRENTNO
494         IF (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
495             SKIP - 1
496             IF BOF() = .T. THEN
497                 GOTO CURRENTNO
498                 SET COLOR TO W+/R, W+/R
499                 @ 24,16 SAY TOF
500                 DO DELAY
```

```
501             ELSE
502                 IF .NOT. (SITENO = MSITE) THEN
503                     SKIP
504                     SET COLOR TO W+/R, W+/R
505                     @ 24,16 SAY TOF
506                     DO DELAY
507                 ENDIF
508             ENDIF BOF() = .T.
509         ENDIF (MSITE >= LOSITE .AND. MSITE <= HISITE)
510     ENDIF CHOICE = "P"
511 *  USER HAS DECIDED TO EXIT THE REVIEW
512 *
513     IF CHOICE  = "X"
514         EXIT
515     ENDIF
516 ENDDO WHILE .T.
517 *
518 * RETURN TO CALLING PROGRAM.
519 *
520 RELEASE ALL LIKE M*, ACCEPT, ANS, CHOICE, CURRENTNO, EOF, INTRO,;
521         NODATE, NOFIND, SYSDATE, TOF
522 CLOSE DATABASES
523 RETURN
524 ************************************************************************
```

Page 1 SITERPTS.PRG Program Listing

```
1  * PROCEDURE SITERPTS.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SELECTION OF SITE LEVEL REPORTS.
9  *
10 * INPUT FILES     : NONE.
11 *
12 * OUTPUT FILES    : NONE.
13 *
14 * CALLED BY       : REPORCMD.PRG
15 *
16 * MODULES CALLED : EQPSTRPT.PRG, MNLSTRPT.PRG, SNOSTRPT.PRG
17 *
18 * LOCAL VARIABLES: SELEKT
19 *
20 * DATE LAST TIME MODIFIED ==========> 18 DECEMBER 1985 <==========
21 *
22 * DISPLAY THE PROCESS MENU TO THE USER AND WAIT FOR THE SELECTION.
23 *
24 STORE "1" TO SITERPTS
25 DO WHILE SITERPTS < "4"
26    SET COLOR TO W/B, W/B, B
27    CLEAR
28    ?? FLASH + "W.SITERPTS/"
29    SET CONSOLE OFF
30    WAIT TO SITERPTS
31    SET CONSOLE ON
32 *
33 *  PROCESS ROUTINE BASED ON THE USER"S SELECTION.
34 *
35    DO CASE
36 *
37 *       CALL THE EQUIPMENT SITE LEVEL REPORT.
38        CASE SITERPTS = "1"
39            DO EQPSTRPT
40 *
41 *       CALL THE MANUAL SITE LEVEL REPORT.
42        CASE SITERPTS = "2"
43            DO MNLSTRPT
44 *
45 *       CALL THE SERIAL NUMBER SITE LEVEL REPORT.
46        CASE SITERPTS = "3"
47            DO SNOSTRPT
48 *
49 *       RETURN TO THE SPLICE REPORTING LEVEL MENU.
50        CASE SITERPTS = "4"
```

```
51| *
52|    ENDCASE
53| *
54| ENDDO  (WHILE SITERPTS = "4")
55| *
56| *  RETURN TO THE CALLING PROGRAM
57| *
58| RETURN
59| ************************************************************************
```

Page 1 SNODTRPT.PRG Program Listing

```
1  * PROCEDURE SNODTRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE SERIAL NUMBER
9  *                   EFFECTIVE DELIVERY ORDER LEVEL REPORT.
10 *
11 * INPUT FILES     : SERIALNO.DBF, SERNODAT.NDX, DESCRIP.DBF,
12 *                   DESCRIP.NDX, EQUIP.DBF, EQUIPSIT.NDX
13 *
14 * CALLED BY       : DATERPTS.PRG
15 *
16 * MODULES CALLED : NONE.
17 *
18 * GLOBAL VARIABLE: HIDATE, HISITE, LODATE, LOSITE
19 *
20 * LOCAL VARIABLES: ACCEPT, CHOICE, COLCNT, ERROR, LINECT, MDAY, MKEY,
21 *                  MMONTH, MNEWDATE, MOLDATE, MSITE, MYEAR, PAGENO,
22 *                  SYSDATE, TODAY, TODATE
23 *
24 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
25 *
26 * CASE SELECTION = 3   SERIAL NUMBER EFFECTIVE DELIVERY ORDER LEVEL REPORT
27 *
28 * CALL THE SERIAL NUMBER DATABASE INDEXED ON SITE NUMBER.  DISPLAY
29 * THE EFFECTIVE DELIVERY ORDER DATES FOR THE USER TO SELECT FROM.
30 * CALL SERIAL NUMBER DATABASE INDEXED ON EFFECTIVE DELIVERY ORDER DATE
31 * AND SITE NUMBER. COPY TO TEMPONE, INDEXED ON FEATURE NUMBER. RELATE
32 * TO THE DESCRIPTION FILE AND PRODUCE REPORT.
33 *
34 SET ESCAPE OFF
35 SET TALK OFF
36 SET COLOR TO W+/B, W+/B, B
37 CLEAR
38 USE SERIALNO
39 GO TOP
40 IF EOF() = .T. THEN
41    SET COLOR TO W+/R, W+/R
42    @ 13,22 SAY " The SERIAL NUMBER Database is EMPTY! "
43    DO DELAY
44    RETURN
45 ENDIF
46 ?? FLASH + "S.REPORTS.SCR/"
47 @ 24,0 SAY SPACE(80)
48 SET COLOR TO R+/ , R+/
49 @ 2,26 SAY " SITE SERIAL NUMBER REPORT "
50 SET COLOR TO W+/BR, W+/BR
```

```
@ 13,15 SAY "Enter site number for which the report is desired:"
*
*  ENSURE THAT TEMPORARY DATABASE AND INDEX DO NOT EXIST,
*  IF SO ERASE THEM
*
SET CONSOLE OFF
ERASE TEMPONE.DBF
ERASE TEMPONE.NDX
SET CONSOLE ON
USE SERIALNO INDEX SERNOSIT
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No serial numbers exist for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,13 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .T.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
*
SET COLOR TO W+/B, W+/B
@ 05,09 SAY "The following Delivery Order Effective Dates exist for Site"
@ 05,69 SAY MSITE
SET COLOR TO  /BR,  /BR
@ 13,05 SAY SPACE(70)
STORE 1 TO LINECT
STORE 1.00 TO COLCNT
STORE "000000" TO MOLDATE
```

```
101 *
102 DO WHILE SITENO = MSITE
103    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
104        @LINECT+6,57 SAY EFFDATE
105    ELSE
106        IF (COLCNT - (COLCNT * (COLCNT/2)) = 0.00) THEN
107            @LINECT+6,38 SAY EFFDATE
108        ELSE
109            @LINECT+6,19 SAY EFFDATE
110        ENDIF  (COLCNT - (COLCNT * (COLCNT/2)) = 0.00)
111    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
112    IF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00) THEN
113        LINECT = 1 + LINECT
114        COLCNT = 1.00
115    ELSE
116        COLCNT = COLCNT + 1.00
117    ENDIF (COLCNT - (COLCNT * (COLCNT/3)) = 0.00)
118    STORE EFFDATE TO MOLDATE
119 *
120    DO WHILE ((EFFDATE = MOLDATE) .AND. .NOT. EOF())
121       SKIP+2
122    ENDDO
123 *
124    IF EOF() THEN
125        EXIT
126    ELSE
127        SKIP
128    ENDIF EOF() = .T.
129 ENDDO WHILE SITENO = MSITE
130 *
131 STORE DTOC(DATE()) TO SYSDATE
132 STORE SUBSTR(SYSDATE,7,2) + SUBSTR(SYSDATE,1,2) +;
133       SUBSTR(SYSDATE,4,2) TO MDATE
134 STORE SPACE(17) + 'Input Effective Date  (Range ' + LODATE +;
135       ' to ' + HIDATE + ')' + SPACE(17) TO MESSAGE
136 SET COLOR TO  /W,  /W
137 @ 24,0 SAY MESSAGE
138 SET COLOR TO W+/B, W+/B
139 @ 3,29 SAY "EFFECTIVE DATE: "
140 *
141 USE SERIALNO INDEX SERNODAT
142 STORE "000000" TO MOLDATE
143 *
144 DO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
145    STORE MDATE TO MOLDATE
146    SET COLOR TO R+/B, R+/B
147    @ 3,45 GET MOLDATE PICT "999999"
148    READ
149    DO WHILE .T.
150        IF .NOT. (SUBSTR(MOLDATE,1,2) > "83" .AND.;
```

```
151                 SUBSTR(MOLDATE,1,2) <= "99") THEN
152             SET COLOR TO W/B, W/B
153             @ 24,0 SAY SPACE(80)
154             SET COLOR TO W+/R, W+/R
155             @ 24,16 SAY " Year portion of date must be between 84 and 99 "
156             DO DELAY
157             SET COLOR TO  /W,  /W
158             @ 24,0 SAY MESSAGE
159             STORE SUBSTR(MDATE,1,2) TO MYEAR
160             SET COLOR TO R+/B, R+/B
161             @ 3,45 GET MYEAR PICT "99"
162             READ
163             STORE MYEAR + SUBSTR(MOLDATE,3,4) TO MOLDATE
164         ELSE
165             EXIT
166         ENDIF
167     ENDDO WHILE .T.
168 *
169     DO WHILE .T.
170         IF .NOT. (SUBSTR(MOLDATE,3,2) >= "01" .AND.;
171                 SUBSTR(MOLDATE,3,2) <= "12") THEN
172             SET COLOR TO W/B, W/B
173             @ 24,0 SAY SPACE(80)
174             SET COLOR TO W+/R, W+/R
175             @ 24,16 SAY " Month portion of date must be between 01 and 12 "
176             DO DELAY
177             SET COLOR TO  /W,  /W
178             @ 24,0 SAY MESSAGE
179             STORE SUBSTR(MDATE,3,2) TO MMONTH
180             SET COLOR TO R+/B, R+/B
181             @ 3,47 GET MMONTH PICT "99"
182             READ
183             STORE SUBSTR(MOLDATE,1,2) + MMONTH +;
184                   SUBSTR(MOLDATE,5,2) TO MOLDATE
185         ELSE
186             EXIT
187         ENDIF
188     ENDDO WHILE .T.
189 *
190     DO WHILE .T.
191     IF ((SUBSTR(MOLDATE,3,2) = "04" .OR. SUBSTR(MOLDATE,3,2) = "06" .OR.;
192         SUBSTR(MOLDATE,3,2) = "09" .OR. SUBSTR(MOLDATE,3,2) = "11") .AND. .NOT.;
193         (SUBSTR(MOLDATE,5,2) >= "01" .AND. SUBSTR(MOLDATE,5,2) <= "30")) THEN
194         SET COLOR TO W/B, W/B
195         @ 24,0 SAY SPACE(80)
196         SET COLOR TO W+/R, W+/R
197         @ 24,16 SAY " Day portion of date must be between 01 and 30 "
198         DO DELAY
199         SET COLOR TO  /W,  /W
200         @ 24,0 SAY MESSAGE
```

```
201         STORE SUBSTR(MDATE,5,2) TO MDAY
202         SET COLOR TO R+/B, R+B
203         @ 3,49 GET MDAY PICT "99"
204         READ
205         STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
206         LOOP
207     ELSE
208 *
209     IF (SUBSTR(MOLDATE,3,2) = "02" .AND. .NOT.;
210        (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
211         SUBSTR(MOLDATE,5,2) <= "28")) THEN
212         SET COLOR TO W/B, W/B
213         @ 24,0 SAY SPACE(80)
214         SET COLOR TO W+/R, W+/R
215         @ 24,16 SAY " Day portion of date must be between 01 and 28 "
216         DO DELAY
217         SET COLOR TO  /W,  /W
218         @ 24,0 SAY MESSAGE
219         STORE SUBSTR(MDATE,5,2) TO MDAY
220         SET COLOR TO R+/B, R+B
221         @ 3,49 GET MDAY PICT "99"
222         READ
223         STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
224         LOOP
225     ELSE
226 *
227     IF .NOT. (SUBSTR(MOLDATE,5,2) >= "01" .AND.;
228               SUBSTR(MOLDATE,5,2) <= "31") THEN
229         SET COLOR TO W/B, W/B
230         @ 24,0 SAY SPACE(80)
231         SET COLOR TO W+/R, W+/R
232         @ 24,16 SAY " Day portion of date must be between 01 and 31 "
233         DO DELAY
234         SET COLOR TO  /W,  /W
235         @ 24,0 SAY MESSAGE
236         STORE SUBSTR(MDATE,5,2) TO MDAY
237         SET COLOR TO R+/B, R+B
238         @ 3,49 GET MDAY PICT "99"
239         READ
240         STORE SUBSTR(MOLDATE,1,4) + MDAY TO MOLDATE
241         LOOP
242     ELSE
243         EXIT
244     ENDIF
245     ENDIF
246     ENDIF
247     ENDDO WHILE .T.
248 *
249     GO TOP
250     STORE MSITE + MOLDATE TO MKEY
```

```
251|    FIND &MKEY
252|    IF EOF() = .T. THEN
253|        SET COLOR TO W/B, W/B
254|        @ 24,0 SAY SPACE(80)
255|        STORE " EFFECTIVE DATE " + MOLDATE + " does not exist for site " +;
256|              MSITE + ", try another " TO NODATE
257|        SET COLOR TO W+/R, W+/R
258|        @ 24,10 SAY NODATE
259|        DO DELAY
260|        SET COLOR TO  /W,  /W
261|        @ 24,0 SAY MESSAGE
262|        STORE "000000" TO MOLDATE
263|        LOOP
264|    ELSE
265|        EXIT
266|    ENDIF EOF() = .T.
267| ENDDO WHILE .NOT. (MOLDATE >= LODATE .AND. MOLDATE <= HIDATE)
268| *
269| SET COLOR TO W+/B, W+/B
270| @ 05,05 SAY SPACE(70)
271| @ 24,0 SAY SPACE(80)
272| *
273| *  CLEAR LISTING OF EFFECTIVE DATES FROM SCREEN
274| *
275| SET COLOR TO  /BR,  /BR
276| @ 07,2 SAY SPACE(76)
277| @ 08,2 SAY SPACE(76)
278| @ 09,2 SAY SPACE(76)
279| @ 10,2 SAY SPACE(76)
280| @ 11,2 SAY SPACE(76)
281| @ 12,2 SAY SPACE(76)
282| @ 13,2 SAY SPACE(76)
283| @ 14,2 SAY SPACE(76)
284| @ 15,2 SAY SPACE(76)
285| @ 16,2 SAY SPACE(76)
286| @ 17,2 SAY SPACE(76)
287| @ 18,2 SAY SPACE(76)
288| @ 19,2 SAY SPACE(76)
289| @ 20,2 SAY SPACE(76)
290| @ 21,2 SAY SPACE(76)
291| *
292| SET COLOR TO R+/ , R+/
293| @ 13,18 SAY " CREATING TEMPORARY DATABASE AND INDEX FILE "
294| *
295| COPY TO TEMPONE FOR SITENO = "&MSITE" .AND. EFFDATE = "&MOLDATE"
296| SELECT 1
297| USE TEMPONE
298| INDEX ON FEATURENO TO TEMPONE
299| SELECT 2
300| USE DESCRIP INDEX DESCRIP
```

```
301 SELECT TEMPONE
302 SET RELATION TO FEATURENO INTO DESCRIP
303 GO TOP
304 *
305 *   CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
306 *   IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
307 *
308 SET COLOR TO W+/BR, W+/BR
309 @ 13,15 SAY SPACE(60)
310 @ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
311 SET COLOR TO  /BR,  /BR .
312 @ 13,49 SAY "Y"
313 @ 13,56 SAY "N"
314 STORE "N" TO ACCEPT
315 @ 13,62 GET ACCEPT PICT "!"
316 READ
317 *
318 *   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
319 *
320 DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
321     IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
322         SET COLOR TO W+/R, W+/R
323         @ 24,24 SAY " Response must be either N or Y "
324         DO DELAY
325         STORE "N" TO ACCEPT
326     ENDIF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
327     SET COLOR TO  /BR,  /BR
328     @ 13,62 GET ACCEPT PICT "!"
329     READ
330 ENDDO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
331 *
332 SET COLOR TO  /BR,  /BR
333 @ 13,15 SAY SPACE(55)
334 *
335 IF ACCEPT = "Y" THEN
336    ?? FLASH + "W.PRINTER/"
337    SET CONSOLE OFF
338    WAIT TO CHOICE
339    SET CONSOLE ON
340    SET COLOR TO W/B, W/B
341    @ 22,10 SAY SPACE(65)
342    STORE DTOC(DATE()) TO TODAY
343    STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
344          SUBSTR(TODAY,7,2) TO TODATE
345    STORE 0 TO PAGENO
346    STORE 61 TO LINECT
347    SET COLOR TO R+/ , R+/
348    SET DEVICE TO PRINT
349 *
350    DO WHILE .NOT. EOF()
```

```
351         DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
352              @ LINECT,3  SAY SITENO PICT "99"
353              @ LINECT,7  SAY B->CLIN PICT "9999"
354              @ LINECT,15 SAY FEATURENO PICT "999999"
355              @ LINECT,24 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!"
356              @ LINECT,52 SAY EFFDATE PICT "999999"
357              @ LINECT,60 SAY TOTQTY PICT "999"
358              @ LINECT,65 SAY QTY PICT "999"
359              @ LINECT,70 SAY SERIALNO PICT "!!!!!!!!"
360              LINECT = LINECT + 1
361              SKIP
362         ENDDO WHILE (LINECT <= 60 .AND. .NOT. EOF())
363 *
364         IF EOF() = .T. THEN
365             IF PAGENO > 1 THEN
366                 @ 62,37 SAY "Page " + STR(PAGENO,2,0)
367             ENDIF PAGENO > 1
368             EJECT
369             SET DEVICE TO SCREEN
370             @ 13,25 SAY " FINISHED PRINTING THE REPORT "
371             DO DELAY
372             EXIT
373         ELSE
374             SET DEVICE TO SCREEN
375             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
376             SET DEVICE TO PRINT
377         ENDIF EOF() = .T.
378 *
379         IF (LINECT > 60 .AND. PAGENO > 1) THEN
380             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
381         ENDIF (LINECT > 60 .AND. PAGENO > 1)
382         @ 2,26 SAY " SITE SERIAL NUMBER REPORT "
383         @ 3,29 SAY "EFFECTIVE DATE: "
384         @ 3,45 SAY MOLDATE
385         @ 4,60 SAY TODATE
386         @ 6,52 SAY "EFFECT  TOT COMPT  SERIAL"
387         @ 7,2  SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
388         @ 7,60 SAY "QTY  QTY   NUMBER"
389         @ 8,2  SAY "================================================="
390         @ 8,51 SAY "============================"
391         PAGENO = PAGENO + 1
392         STORE 10 TO LINECT
393 *
394     ENDDO WHILE .NOT. EOF()
395 ELSE
396     SET COLOR TO GR+/B, GR+/B
397     @ 4,52 SAY "EFFECT  TOT COMPT  SERIAL"
398     @ 5,2 SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
399     @ 5,60 SAY "QTY  QTY   NUMBER"
400     SET COLOR TO  /BR,  /BR
```

```
401     STORE 0 TO LINECT
402  *
403     DO WHILE .NOT. EOF()
404         DO WHILE LINECT < 15
405             @ LINECT+7,3  SAY SITENO PICT "99"
406             @ LINECT+7,7  SAY B->CLIN PICT "9999"
407             @ LINECT+7,15 SAY FEATURENO PICT "999999"
408             @ LINECT+7,24 SAY B->DESCIPT PICT "!!!!!!!!!!!!!!!!!!!!!!!!!"
409             @ LINECT+7,52 SAY EFFDATE PICT "999999"
410             @ LINECT+7,60 SAY TOTQTY PICT "999"
411             @ LINECT+7,65 SAY QTY PICT "999"
412             @ LINECT+7,70 SAY SERIALNO PICT "!!!!!!!!"
413             LINECT = LINECT + 1
414             SKIP
415             IF EOF() = .T. THEN
416                 SET COLOR TO W+/R, W+/R
417                 @ 24,18 SAY " End of File reached, Press any key to EXIT "
418                 SET CONSOLE OFF
419                 WAIT TO ACCEPT
420                 SET CONSOLE ON
421                 EXIT
422             ENDIF EOF() = .T.
423         ENDDO WHILE LINECT < 15
424  *
425         IF EOF() = .T. THEN
426             EXIT
427         ENDIF EOF() = .T.
428         SET COLOR TO R+/B, R+/B
429         STORE "C" TO CHOICE
430         @ 22,57 GET CHOICE PICT "!"
431         READ
432  *
433  *      ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
434  *
435         DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
436             IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
437                 SET COLOR TO W+/R, W+/R
438                 @ 24,24 SAY " Response must be either C or X "
439                 DO DELAY
440                 STORE "C" TO CHOICE
441             ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
442             SET COLOR TO R+/B, R+/B
443             @ 22,57 GET CHOICE PICT "!"
444             READ
445         ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
446  *
447  *      DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
448  *
449         IF CHOICE = "C"
450             SET COLOR TO  /BR,  /BR
```

```
451             @ 07,2 SAY SPACE(76)
452             @ 08,2 SAY SPACE(76)
453             @ 09,2 SAY SPACE(76)
454             @ 10,2 SAY SPACE(76)
455             @ 11,2 SAY SPACE(76)
456             @ 12,2 SAY SPACE(76)
457             @ 13,2 SAY SPACE(76)
458             @ 14,2 SAY SPACE(76)
459             @ 15,2 SAY SPACE(76)
460             @ 16,2 SAY SPACE(76)
461             @ 17,2 SAY SPACE(76)
462             @ 18,2 SAY SPACE(76)
463             @ 19,2 SAY SPACE(76)
464             @ 20,2 SAY SPACE(76)
465             @ 21,2 SAY SPACE(76)
466             STORE 0 TO LINECT
467          ELSE
468             EXIT
469          ENDIF CHOICE = "C"
470  *
471       ENDDO WHILE .NOT. EOF()
472  *
473  ENDIF ACCEPT = "Y"
474  *
475  *  ERASE ALL TEMPORARY FILES CREATED DURING REPORT GENERATION
476  *
477  CLOSE DATABASES
478  SET CONSOLE OFF
479  ERASE TEMPONE.DBF
480  ERASE TEMPONE.NDX
481  SET CONSOLE ON
482  SET PRINT OFF
483  *
484  *  RETURN TO CALLING PROGRAM
485  *
486  RELEASE ALL LIKE M*, ACCEPT, CHOICE, COLCNT, LINECT, PAGENO,;
487          SYSDATE, TODAY, TODATE
488  RETURN
489  ************************************************************************
```

```
1  * PROCEDURE SNOPJRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE SERIAL NUMBER
9  *                   PROJECT LEVEL REPORT.
10 *
11 * INPUT FILES     : SERIALNO.DBF, SERNOPRJ.NDX, DESCRIP.DBF, DESCRIP.NDX
12 *
13 * OUTPUT FILES    : NONE.
14 *
15 * CALLED BY       : PROJRPTS.PRG
16 *
17 * MODULES CALLED : DELAY.PRG
18 *
19 * LOCAL VARIABLES: ACCEPT, CHOICE, LINECT, PAGENO, TODAY, TODATE
20 *
21 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
22 *
23 * CASE SELECTION = 2    SERIAL NUMBER PROJECT LEVEL REPORT
24 *
25 * CALL SERIAL NUMBER DATABASE INDEXED ON EFFECTIVE DATE, SITE NUMBER,
26 * AND FEATURE NUMBER.  RELATE TO DESCRIP FILE ON FEATURENO.
27 *
28 SET ESCAPE OFF
29 SET TALK OFF
30 SET COLOR TO W+/B, W+/B, B
31 CLEAR
32 USE SERIALNO
33 GO TOP
34 IF EOF() = .T. THEN
35    SET COLOR TO W+/R, W+/R
36    @ 13,22 SAY " The SERIAL NUMBER Database is EMPTY! "
37    DO DELAY
38    RETURN
39 ENDIF
40 ?? FLASH + "S.REPORTS.SCR/"
41 @ 24,0 SAY SPACE(80)
42 SET COLOR TO R+/ , R+/
43 @ 2,18 SAY " EQUIPMENT SERIAL NUMBER PROJECT LEVEL REPORT "
44 SELECT 1
45 USE SERIALNO INDEX SERNOPRJ.NDX
46 SELECT 2
47 USE DESCRIP INDEX DESCRIP
48 SELECT SERIALNO
49 SET RELATION TO FEATURENO INTO DESCRIP
50 GO TOP
```

```
51  *
52  *  CREATE THE SPLICE SERIAL NUMBER PROJECT REPORT AND CHECK IF THE REPORT
53  *  IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
54  *
55  SET COLOR TO W+/BR, W+/BR
56  @ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
57  SET COLOR TO  /BR,  /BR
58  @ 13,49 SAY "Y"
59  @ 13,56 SAY "N"
60  STORE "N" TO ACCEPT
61  @ 13,62 GET ACCEPT PICT "!"
62  READ
63  *
64  *   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
65  *
66  DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
67      IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
68          SET COLOR TO W+/R, W+/R
69          @ 24,24 SAY " Response must be either N or Y "
70          DO DELAY
71          STORE "N" TO ACCEPT
72      ENDIF
73      SET COLOR TO  /BR,  /BR
74      @ 13,62 GET ACCEPT PICT "!"
75      READ
76  ENDDO
77  *
78  SET COLOR TO  /BR,  /BR
79  @ 13,15 SAY SPACE(55)
80  *
81  IF ACCEPT = "Y" THEN
82     ?? FLASH + "W.PRINTER/"
83     SET CONSOLE OFF
84     WAIT TO CHOICE
85     SET CONSOLE ON
86     SET COLOR TO W/B, W/B
87     @ 22,10 SAY SPACE(65)
88     STORE 0 TO PAGENO
89     STORE 61 TO LINECT
90     STORE DTOC(DATE()) TO TODAY
91     STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
92           SUBSTR(TODAY,7,2) TO TODATE
93     SET COLOR TO R+/ , R+/
94     SET DEVICE TO PRINT
95  *
96     DO WHILE .NOT. EOF()
97         DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
98              @ LINECT,3  SAY SITENO
99              @ LINECT,7  SAY DESCRIP->CLIN
100             @ LINECT,15 SAY FEATURENO
```

```
101             @ LINECT,24 SAY DESCRIP->DESCIPT
102             @ LINECT,52 SAY EFFDATE
103             @ LINECT,60 SAY TOTQTY
104             @ LINECT,65 SAY QTY
105             @ LINECT,70 SAY SERIALNO
106             LINECT = LINECT + 1
107             SKIP
108         ENDDO WHILE
109 *
110         IF EOF() = .T. THEN
111             IF PAGENO > 1 THEN
112                 @ 62,37 SAY "Page " + STR(PAGENO,2,0)
113             ENDIF
114             EJECT
115             SET DEVICE TO SCREEN
116             @ 13,25 SAY " FINISHED PRINTING THE REPORT "
117             DO DELAY
118             EXIT
119         ELSE
120             SET DEVICE TO SCREEN
121             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
122             SET DEVICE TO PRINT
123         ENDIF
124 *
125         IF (LINECT > 60 .AND. PAGENO > 1) THEN
126             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
127         ENDIF
128         @ 2,18 SAY " EQUIPMENT SERIAL NUMBER PROJECT LEVEL REPORT "
129         @ 4,62 SAY TODATE
130         @ 6,52 SAY "EFFECT  TOT COMPT  SERIAL"
131         @ 7,2  SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
132         @ 7,60 SAY "QTY  QTY   NUMBER"
133         @ 8,2  SAY "================================================="
134         @ 8,51 SAY "============================"
135         PAGENO = PAGENO + 1
136         STORE 10 TO LINECT
137 *
138     ENDDO WHILE .NOT. EOF()
139 *
140 ELSE
141     SET COLOR TO GR+/B, GR+/B
142     @ 4,52 SAY "EFFECT  TOT COMPT  SERIAL"
143     @ 5,2  SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
144     @ 5,60 SAY "QTY  QTY   NUMBER"
145     SET COLOR TO  /BR,  /BR
146     STORE 0 TO LINECT
147 *
148     DO WHILE .NOT. EOF()
149         DO WHILE LINECT < 15
150             @ LINECT+7,3  SAY SITENO
```

```
151|           @ LINECT+7,7  SAY DESCRIP->CLIN
152|           @ LINECT+7,15 SAY FEATURENO
153|           @ LINECT+7,24 SAY DESCRIP->DESCIPT
154|           @ LINECT+7,52 SAY EFFDATE
155|           @ LINECT+7,60 SAY TOTQTY
156|           @ LINECT+7,65 SAY QTY
157|           @ LINECT+7,70 SAY SERIALNO
158|           LINECT = LINECT + 1
159|           SKIP
160|           IF EOF() = .T. THEN
161|               SET COLOR TO W+/R, W+/R
162|               @ 24,18 SAY " End of File reached, Press any key to EXIT "
163|               SET CONSOLE OFF
164|               WAIT TO ACCEPT
165|               SET CONSOLE ON
166|               EXIT
167|           ENDIF
168|       ENDDO WHILE LINECT < 15
169| *
170|       IF EOF() = .T. THEN
171|           EXIT
172|       ENDIF
173|       SET COLOR TO R+/B, R+/B
174|       STORE "C" TO CHOICE
175|       @ 22,57 GET CHOICE PICT "!"
176|       READ
177| *
178| *     ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
179| *
180|       DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
181|           IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
182|               SET COLOR TO W+/R, W+/R
183|               @ 24,24 SAY " Response must be either C or X "
184|               DO DELAY
185|               STORE "C" TO CHOICE
186|           ENDIF
187|           SET COLOR TO R+/B, R+/B
188|           @ 22,57 GET CHOICE PICT "!"
189|           READ
190|       ENDDO
191| *
192| *     DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
193| *
194|       IF CHOICE = "C"
195|           SET COLOR TO  /BR,  /BR
196|           @ 07,2 SAY SPACE(76)
197|           @ 08,2 SAY SPACE(76)
198|           @ 09,2 SAY SPACE(76)
199|           @ 10,2 SAY SPACE(76)
200|           @ 11,2 SAY SPACE(76)
```

```
201             @ 12,2 SAY SPACE(76)
202             @ 13,2 SAY SPACE(76)
203             @ 14,2 SAY SPACE(76)
204             @ 15,2 SAY SPACE(76)
205             @ 16,2 SAY SPACE(76)
206             @ 17,2 SAY SPACE(76)
207             @ 18,2 SAY SPACE(76)
208             @ 19,2 SAY SPACE(76)
209             @ 20,2 SAY SPACE(76)
210             @ 21,2 SAY SPACE(76)
211             STORE 0 TO LINECT
212         ELSE
213             EXIT
214         ENDIF
215 *
216     ENDDO WHILE .NOT. EOF()
217 *
218 ENDIF
219 *
220 * RETURN TO CALLING PROGRAM
221 *
222 SET PRINT OFF
223 RELEASE ACCEPT, CHOICE, LINECT, PAGENO, TODAY, TODATE
224 CLOSE DATABASES
225 RETURN
226 ************************************************************************
```

Page 1 SNOSTRPT.PRG Program Listing

```
1  * PROCEDURE SNOSTRPT.PRG
2  *
3  * AUTHORS         : LCDR EDWARD J. CASE, SC, USN
4  *                   LCDR WINSTON H. BUCKLEY, SC, USN
5  *                   LCDR ROBERT F. BRADO, USN
6  *                   LCDR ROBERT L. BEARD III, SC, USN
7  *
8  * PURPOSE         : PROVIDE THE USER A SPLICE SERIAL NUMBER
9  *                   SITE LEVEL REPORT.
10 *
11 * INPUT FILES     : SERIALNO.DBF, SERNOSIT.NDX, DESCRIP.DBF,
12 *                   DESCRIP.NDX
13 *
14 * CALLED BY       : SITERPTS.PRG
15 *
16 * MODULES CALLED : DELAY.PRG
17 *
18 * GLOBAL VARIABLE: HISITE, LOSITE
19 *
20 * LOCAL VARIABLES: ACCEPT, CHOICE, ERROR, LINECT, MESSAGE, MSITE,
21 *                   PAGENO, TODAY, TODATE
22 *
23 * DATE LAST TIME MODIFIED ==========> 27 DECEMBER 1985 <==========
24 *
25 * CASE SELECTION = 3    SERIAL NUMBER SITE LEVEL REPORT
26 *
27 SET ESCAPE OFF
28 SET TALK OFF
29 SET COLOR TO W+/B, W+/B, B
30 CLEAR
31 USE SERIALNO
32 GO TOP
33 IF EOF() = .T. THEN
34    SET COLOR TO W+/R, W+/R
35    @ 13,22 SAY " The SERIAL NUMBER Database is EMPTY! "
36    DO DELAY
37    RETURN
38 ENDIF
39 ?? FLASH + "S.REPORTS.SCR/"
40 @ 24,0 SAY SPACE(80)
41 SET COLOR TO R+/ , R+/
42 @ 2,26 SAY " SITE SERIAL NUMBER REPORT "
43 SET COLOR TO W+/BR, W+/BR
44 @ 13,15 SAY "Enter site number for which the report is desired:"
45 *
46 *  CALL SERIAL NUMBER DATABASE INDEXED ON SITE NUMBER,
47 *  FEATURE NUMBER AND SERIAL NUMBER.  RELATE TO DESCRIPTION FILE.
48 *
49 SELECT 1
50 USE SERIALNO INDEX SERNOSIT.NDX
```

```
SELECT 2
USE DESCRIP INDEX DESCRIP
SELECT SERIALNO
SET RELATION TO FEATURENO INTO DESCRIP
*
DO WHILE .T.
   SET COLOR TO  /BR,  /BR
   STORE LOSITE TO MSITE
   @ 13,66 GET MSITE PICT '99'
   READ
   IF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE) THEN
       SET COLOR TO W+/R, W+/R
       STORE ' Response must be between ' + LOSITE +;
             ' and ' + HISITE + ' ' TO ERROR
       @ 24,22 SAY ERROR
       DO DELAY
       LOOP
   ELSE
       GO TOP
       FIND &MSITE
       IF EOF() = .T. THEN
           STORE " No serial numbers exist for site " + MSITE +;
                 ", try another site " TO MESSAGE
           SET COLOR TO W+/R, W+/R
           @ 24,13 SAY MESSAGE
           DO DELAY
           LOOP
       ELSE
           EXIT
       ENDIF EOF() = .T.
   ENDIF .NOT. (MSITE >= LOSITE .AND. MSITE <= HISITE)
ENDDO WHILE .T.
*
SET COLOR TO W+/BR, W+/BR
@ 13,15 SAY SPACE(60)
*
*   CREATE THE SPLICE EQUIPMENT PROJECT REPORT AND CHECK IF THE REPORT
*   IS TO BE PRINTED OR DISPLAYED ON THE SCREEN.
*
@ 13,16 SAY " Do you want a printed report?  (Yes or No):  "
SET COLOR TO  /BR,  /BR
@ 13,49 SAY "Y"
@ 13,56 SAY "N"
STORE "N" TO ACCEPT
@ 13,62 GET ACCEPT PICT "!"
READ
*
*   ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
*
DO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
```

```
101|      IF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y") THEN
102|          SET COLOR TO W+/R, W+/R
103|          @ 24,24 SAY " Response must be either N or Y "
104|          DO DELAY
105|          STORE "N" TO ACCEPT
106|      ENDIF .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
107|      SET COLOR TO  /BR,  /BR
108|      @ 13,62 GET ACCEPT PICT "!"
109|      READ
110| ENDDO WHILE .NOT. (ACCEPT = "N" .OR. ACCEPT = "Y")
111| *
112| SET COLOR TO  /BR,  /BR
113| @ 13,15 SAY SPACE(55)
114| *
115| IF ACCEPT = "Y" THEN
116|    ?? FLASH + "W.PRINTER/"
117|    SET CONSOLE OFF
118|    WAIT TO CHOICE
119|    SET CONSOLE ON
120|    SET COLOR TO W/B, W/B
121|    @ 22,10 SAY SPACE(65)
122|    STORE DTOC(DATE()) TO TODAY
123|    STORE SUBSTR(TODAY,4,2) + " " + CMONTH(DATE()) + " 19" +;
124|          SUBSTR(TODAY,7,2) TO TODATE
125|    STORE 0 TO PAGENO
126|    STORE 61 TO LINECT
127|    SET COLOR TO R+/ , R+/
128|    SET DEVICE TO PRINT
129| *
130|    DO WHILE .NOT. EOF()
131|        DO WHILE (LINECT <= 60 .AND. .NOT. EOF())
132|             @ LINECT,3  SAY SITENO
133|             @ LINECT,7  SAY DESCRIP->CLIN
134|             @ LINECT,15 SAY FEATURENO
135|             @ LINECT,24 SAY DESCRIP->DESCIPT
136|             @ LINECT,52 SAY EFFDATE
137|             @ LINECT,60 SAY TOTQTY
138|             @ LINECT,65 SAY QTY
139|             @ LINECT,70 SAY SERIALNO
140|             LINECT = LINECT + 1
141|             SKIP
142|        ENDDO WHILE WHILE (LINECT <= 60 .AND. .NOT. EOF())
143| *
144|        IF EOF() = .T. THEN
145|            IF PAGENO > 1 THEN
146|                @ 62,37 SAY "Page " + STR(PAGENO,2,0)
147|            ENDIF  PAGENO > 1
148|            EJECT
149|            SET DEVICE TO SCREEN
150|            @ 13,25 SAY " FINISHED PRINTING THE REPORT "
```

```
151             DO DELAY
152             EXIT
153         ELSE
154             SET DEVICE TO SCREEN
155             @ 13,27 SAY " Printing Page Number " + STR(PAGENO + 1,2,0) + " "
156             SET DEVICE TO PRINT
157         ENDIF EOF() = .T.
158 *
159         IF (LINECT > 60 .AND. PAGENO > 1) THEN
160             @ 62,37 SAY "Page " + STR(PAGENO,2,0)
161         ENDIF (LINECT > 60 .AND. PAGENO > 1)
162         @ 2,26 SAY " SITE SERIAL NUMBER REPORT "
163         @ 4,60 SAY TODATE
164         @ 6,52 SAY "EFFECT  TOT COMPT  SERIAL"
165         @ 7,2  SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
166         @ 7,60 SAY "QTY  QTY   NUMBER"
167         @ 8,2  SAY "================================================="
168         @ 8,51 SAY "============================"
169         PAGENO = PAGENO + 1
170         STORE 10 TO LINECT
171 *
172     ENDDO WHILE .NOT. EOF()
173 *
174 ELSE
175     SET COLOR TO GR+/B, GR+/B
176     @ 4,52 SAY "EFFECT  TOT COMPT  SERIAL"
177     @ 5,2 SAY "SITE CLIN   FEATURE#          DESCRIPTION          DATE"
178     @ 5,60 SAY "QTY  QTY   NUMBER"
179     SET COLOR TO . /BR,  /BR
180     STORE 0 TO LINECT
181 *
182     DO WHILE .NOT. EOF()
183        DO WHILE LINECT < 15
184            @ LINECT+7,3  SAY SITENO
185            @ LINECT+7,7  SAY DESCRIP->CLIN
186            @ LINECT+7,15 SAY FEATURENO
187            @ LINECT+7,24 SAY DESCRIP->DESCIPT
188            @ LINECT+7,52 SAY EFFDATE
189            @ LINECT+7,60 SAY TOTQTY
190            @ LINECT+7,65 SAY QTY
191            @ LINECT+7,70 SAY SERIALNO
192            LINECT = LINECT + 1
193            SKIP
194            IF EOF() = .T. THEN
195                SET COLOR TO W+/R, W+/R
196                @ 24,18 SAY " End of File reached, Press any key to EXIT "
197                SET CONSOLE OFF
198                WAIT TO ACCEPT
199                SET CONSOLE ON
200                EXIT
```

```
201             ENDIF EOF() = .T.
202         ENDDO WHILE LINECT < 15
203 *
204         IF EOF() = .T. THEN
205             EXIT
206         ENDIF EOF() = .T.
207         SET COLOR TO R+/B, R+/B
208         STORE "C" TO CHOICE
209         @ 22,57 GET CHOICE PICT "!"
210         READ
211 *
212 *       ENSURE THAT THE USER'S RESPONSE IS EITHER "Y" OR "N"
213 *
214         DO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
215             IF .NOT. (CHOICE = "C" .OR. CHOICE = "X") THEN
216                 SET COLOR TO W+/R, W+/R
217                 @ 24,24 SAY " Response must be either C or X "
218                 DO DELAY
219                 STORE "C" TO CHOICE
220             ENDIF .NOT. (CHOICE = "C" .OR. CHOICE = "X")
221             SET COLOR TO R+/B, R+/B
222             @ 22,57 GET CHOICE PICT "!"
223             READ
224         ENDDO WHILE .NOT. (CHOICE = "C" .OR. CHOICE = "X")
225 *
226 *       DETERMINE IF THE USER WANTS TO QUIT OR CONTINUE
227 *
228         IF CHOICE = "C"
229             SET COLOR TO  /BR,  /BR
230             @ 07,2 SAY SPACE(76)
231             @ 08,2 SAY SPACE(76)
232             @ 09,2 SAY SPACE(76)
233             @ 10,2 SAY SPACE(76)
234             @ 11,2 SAY SPACE(76)
235             @ 12,2 SAY SPACE(76)
236             @ 13,2 SAY SPACE(76)
237             @ 14,2 SAY SPACE(76)
238             @ 15,2 SAY SPACE(76)
239             @ 16,2 SAY SPACE(76)
240             @ 17,2 SAY SPACE(76)
241             @ 18,2 SAY SPACE(76)
242             @ 19,2 SAY SPACE(76)
243             @ 20,2 SAY SPACE(76)
244             @ 21,2 SAY SPACE(76)
245             STORE 0 TO LINECT
246         ELSE
247             EXIT
248         ENDIF CHOICE = "C"
249 *
250     ENDDO WHILE .NOT. EOF()
```

```
251| *
252| ENDIF ACCEPT = "Y"
253| *
254| * RETURN TO CALLING PROGRAM
255| *
256| SET PRINT OFF
257| RELEASE ACCEPT, CHOICE, ERROR, LINECT, MESSAGE, MSITE, PAGENO,;
258|         TODAY, TODATE
259| CLOSE DATABASES
260| RETURN
261| ************************************************************************
262|
```

BIBLIOGRAPHY

Alter, Steven, Decision Support Systems, Addison-Wesley, New York, 1980.

Alter, Steven, "A Taxonomy of Decision Support Systems," Sloan Management Review, Vol. 19, No. 1, Fall 1981, pp. 39-56.

Carlson, Eric, "An Approach for Designing Decision Support Systems," Database, Vol. 10, No 3, Winter 1979, pp. 3-15.

Good, Michael D., Whiteside, John A., Wixon, Dennis R., and Jones, Sandra J., "Building a User-Derived Interface," Communications of the Association for Computing Machinery, Vol. 27, No. 10, October 1984, pp. 1032-1043.

Hayes-Roth, Fredrick, "Knowledge-Based Expert Systems," Computer, Vol. 17, No. 10, October 1984, pp. 263-273.

Hayes-Roth, Fredrick, "Rule-Based Systems," Communications of the Association for Computing Machinery, Vol. 28, No. 9, September 1985 pp. 921-932.

Keen, P. G. and Wagner, G. R., "DSS: An Executive Mind-Support System," Datamation, Vol. 25, No. 12, November 1979, pp. 117-122.

Michaelsen, Robert and Michie, Donald," Expert Systems in Business," Datamation, Vol. 29, No. 11, November 1983, pp. 240-246.

Morland, D. Verne, "Human Factors Guidelines for Terminal Interface Design," Communications of the Association for Computing Machinery, Vol. 26, No. 7, July 1983, pp. 484-494.

Nau, Dana S., "Expert Computer Systems," IEEE Computer, Vol. 16, No. 2, February 1983, pp. 63-85.

Slagle, James R. and Hamburger, Henry, "An Expert System for a Resource Allocation Problem," Communications of the Association for Computing Machinery, Vol. 28, No. 9, September 1985 pp. 994-1004.

Stohr, Edward A., and White, Norman H., "User Interfaces for Decision Support Systems: An Overview," International Journal of Policy Analysis and Information Systems, Vol. 6, No. 4, pp. 393-423.

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